

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION DIVISION OF ENGINEERING SERVICES OFFICE ENGINEER

# CONSTRUCTION CONTRACT DEVELOPMENT GUIDE

CCD GUIDE INTRODUCTION

# **INTRODUCTION**

The Construction Contract Development (CCD) Guide captures many of the requirements governing construction contracting from Federal and State laws, the Federal Highway Administration and Department Policies. It replaces the RTL Guide and provides guidance to support the Department's change to full delegation of the Authority to Advertise/District Delegation (AADD) for all districts. The basis for many of the Department's construction contracting policies is Public Contract Code Section 100-102 "Purpose and Preliminary Matters, which establishes the objectives of protecting public funds from misuse, stimulating competition conducive to sound fiscal practices, and eliminating favoritism, fraud, and corruption," and 23 CFR 635.104, 23 CFR 635.112 and 23 US Code Section 112. The Streets & Highway Code authorizes the Department to establish standards for the construction and maintenance of the state highways and the Government Code provides Caltrans and Caltrans employees with Design Immunity as long as our contracts are prepared in conformity with approved standards.

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# PURPOSE, BACKGROUND, PROCESS OVERVIEW AND ACRONYMS

# I. PURPOSE

The Construction Contract Development Guide (CCD Guide) describes activities, roles and responsibilities required by Department, Local Agency and Consultant staff to submit construction contract documents, to advertise, open bids, award and approve construction contracts.

The CCD Guide applies to projects defined by Section 10105 of the Public Contract Code regardless of funding source.

# II. BACKGROUND

Section 10120 of the Public Contract Code (part of the State Contract Act) states:

"Before entering into any contract for a project, the Department shall prepare full, complete, and accurate plans and specifications and estimates of cost, giving such directions as will enable any competent mechanic or other builder to carry them out."

In the Public Contract Code section cited above, the terms "full, complete, and accurate" can be defined as follows:

- "Full" means that all existing and proposed elements necessary to bid and build the project within the scope are included.
- "Complete" means that all elements are detailed.
- "Accurate" means that all elements comply with statutory and departmental requirements, field conditions are correctly depicted, and the Plans, Specifications, and Estimate are consistent.

Division of Engineering Services, Office Engineer (DES-OE) advertises contracts after district certification of compliance with policy, statutory, and regulatory requirements. The district must complete these requirements before DES-OE places a project on the list of projects proposed for advertisement.

Projects are advertised after they are Ready to List (RTL) and funds are allocated in an amount sufficient to cover the capital construction estimate. Once advertised, contracts proceed to bid opening, award, and approval. To complete the award process, funds must be sufficient to provide the total capital construction funds required based on the final low bid amount to the lowest responsible bidder. In addition, the bidder must be validated as the lowest responsive and responsible bidder according to the appropriate policies, statutes, and regulations governing State and Federal contracts. DES-OE has the primary responsibility for contract advertisement, bid opening and award with input from the districts and Divisions.

# III. PROCESS OVERVIEW

The following is a list of products from district submittal of the Construction Contract Submittal to DES-OE through contract approval.

- Contract Ready for Advertising
- Advertised Contract
- Independent Quality Assurance (IQA)
- Bids Opened
- Contract Award
- Contract Execution

# IV. ACRONYMS

AED	Agreement End Date
/ \LU	/ MICCINCIL LIM DUIC

AGC Association of General Contractors

BBS Best Bid Standards

ER Emergency Relief

EVCA Energy and Utility Contractors Association

FFAR Federal Funds Authorization Request

FHWA Federal Highway Administration

FSTIP Federal Statewide Transportation Improvement Program

FTIP Federal Transportation Improvement Program

FY Fiscal Year

G-11 (a CTC resolution)

GES (Identification Code Prefix for Training Classes)

HDM Highway Design Manual

HM Hot Mix Asphalt

HQ Headquarters

IA Independent Assurance

I/D Incentive/Disincentive

IH Information Handout

LAPM Local Assistance Procedure Manual

LD Liquidated Damages

LS Lump Sum

MOU Memorandum of Understanding

NEPA National Environmental Policy Act of 1969

NR North Region (Districts 1, 2&3)

NSP New Standard Plan

NSSP Non Standard Special Provision

NTB&SP Notice to Bidders and Special Provisions

OCCS Office of Construction Contract Standards

OCIP Office of Capital Improvement Programming

OTS Office of Traffic Safety

PA/ED Project Approval/Environmental Document

PCC Portland Cement Concrete

PCE Project Coordination Engineer

PD Project Development

PDF Portable Document Format

PDPM Project Development Procedures Manual

PDWD Project Delivery and Workload Development

PDWT Project Development Workflow Tasks Manual

PE Project Engineer

PIF Public Interest Finding

PISA Project Information Systems and Analysis

PLAC Permits, Licenses, Agreements, and Certifications

PPM Plans Preparation Manual

PPU Plans Preparation Unit

PRC Public Resources Code

PS&E Plans, Specifications, and Estimate

QA Quality Assurance

QC Quality Control

RE Resident Engineer

RR Railroad

RSP Revised Standard Plan

RSS Revised Standard Specification

RSTP Regional Surface Transportation Program

RTEA Regional Transportation Enhancement Authority

RTL Ready-To-List

RUC Road User Cost

R/W Right of Way

# PURPOSE, BACKGROUND, PROCESS OVERVIEW AND ACRONYMS

SCCA Southern California Contractor Association

SE Specification Engineer

SHOPP State Highway Operations and Protection Program

SMARA Surface Mining and Reclamation Act

SOE Structure Office Engineer

SP Special Provisions

SSP Standard Special Provision

STIP State Transportation Improvement Program

SWPPP Storm Water Pollution Prevention Plan

TAEMWW Transportation Architecture, Electrical, Mechanical, Water and

Waste Water

TERO Tribal Employment Rights Ordinances

TIF Tagged Information File

TMP Traffic Management Plan

TRO Time-Related Overhead

TSI Transportation System Information

UCON United contractors

UDBE Underutilized Disadvantaged Business Enterprises

USC United States Code (Federal)

# SECTION 1 REQUIREMENTS FOR READY TO LIST

# 1.1 PURPOSE

This section provides general references for the Ready to List (RTL) Milestone.

# 1.2 RESPONSIBILITIES

See Chapter 2 – Roles and Responsibilities of the Project Development Procedures Manual (PDPM) <a href="http://www.dot.ca.gov/hq/oppd/pdpm/pdpmn.htm">http://www.dot.ca.gov/hq/oppd/pdpm/pdpmn.htm</a>

# 1.3 REQUIREMENTS

# 1.3.1 RIGHT OF WAY (R/W)

# **Right of Way Certification**

#### References:

Title 23 of the Code of Federal Regulations (CFR) Sections 635.309 and 710.311, Right of Way Manual Chapter 14 and Right of Way policy memos.

# **Railroad Clearance**

# References:

Title 23 CFR 646.216 and 635.309, Right of Way Manual Chapters 8 and 14, CCD Guide Section 6.11. Provide copies of the Railroad Clearance Memorandum from Division of Right of Way, plus an electronic copy, in Microsoft Word format, and provide RR Agreements as Supplemental Project Information in the Information Handout.

# 1.3.2 ENVIRONMENTAL CERTIFICATION

#### References:

Title 23 CFR 771.129(c), PRC 21000 et seq., and the Department's Standard Environmental Reference.

# Compliance:

Provide an electronic copy to DES-OE. Provide the signature date and the expiration date, which is either 12 months after the date of signature or the earliest PLAC or other commitment expiration date, whichever occurs first.

# 1.3.3 DESIGN REQUIREMENTS

# a. Standards

See Chapter 80 of the Highway Design Manual: <a href="http://www.dot.ca.gov/hq/oppd/hdm/hdmtoc.htm">http://www.dot.ca.gov/hq/oppd/hdm/hdmtoc.htm</a>

#### b. Water Conservation

http://www.dot.ca.gov/hq/LandArch/16\_la\_design/water\_conserv/index.htm

# c. Agency Agreements

Include copies of fully executed agreements with the Construction Contract Submittal.

#### 1.3.4 FHWA

# a. Stewardship Agreement References:

http://www.dot.ca.gov/hq/oppd/stewardship/index.htm

# b. Public Interest Finding (PIF) References:

http://onramp/hq/budgets/federalresources/library/PIF\_Guidelines\_Oct\_2013.pdf

#### 1.3.5 TRAFFIC OPERATIONS

# Overview:

Deputy Directive DD-60-R1, Traffic Management Plans, requires Transportation Management Plans (TMPs) for all planned construction, maintenance, and encroachment permit activities on the State Highway System. The District Traffic Manager or the District Transportation Management Plan Manager verifies that the TMP is updated at RTL.

#### Reference:

Project Development Workflow Tasks Manual (PDWT), Transportation Management Plan Guidelines and DD-60-R2.

Table 1-1
Expiration and Update Requirements for RTL Documents

Expiration and Update Requirements for RIL Documents								
Document	Expires After	Must Be Valid at (Milestone)	Contact Division of	Reference				
R/W Certification	1 Year	Advertisement Date	Right of Way & Land Surveys	R/W manual Section 14				
R/R Clearance Memo	PS&E changes impacting R/R are made	Project listed for advertisement	Right of Way & Land Surveys	R/W manual Section 8				
Environmental Certification	Permit requirements change	Project listed for advertisement	Environmental Analysis	http://www.dot.ca. gov/hq/env/				
DTM or TMP Manager verification	PS&E changes impacting the TMP are made	Project listed for advertisement	Traffic Operations	DD-60-R2				
PE Seal on individual Plan Sheets	Perpetual*	Date of signature	Design (Office of Professional Development)	Business and Professions Code				
PE Seal on Title Sheet	Perpetual*	Date of signature	Design (Office of Professional Development)	Business and Professions Code				
PE Seal on Special Provisions	Perpetual*	Date of signature	Design (Office of Professional Development)	Business and Professions Code				
Project Engineer's Certification of Utility Facilities	Perpetual*	Project listed for advertisement	Design (Office of Professional Development)	PDPM, Appendix LL				
Storm Water Data Report	When revised permit conditions require a change	Project listed for advertisement	Design	Storm Water Data Report Caltrans Storm Water Quality Handbooks / Project Planning and Design Guide May 2007 See Appendix E				
Hazardous Waste Report	PS&E changes impacting area of contamination requirements change	Project listed for advertisement	Environmental Analysis	PDPM CH. 18				

<sup>\*</sup> The seal is valid in perpetuity as long as there have been no revisions to the sheet on which the seal is affixed. (An example of a revision is when CCOs are approved during the construction phase of the project and the engineer of record is not available to approve the change. A licensed engineer can sign off on the change, and that individual would be responsible for the change as well as any other items related to that change.)

# SECTION 2 RTL CERTIFICATION

# 2.1 PURPOSE

The RTL Certification documents the completion of all applicable Ready to List requirements. Projects are deemed RTL when the supervisor of the PE approves the final RTL Certification signed and sealed by the PE certifying that all applicable design, right of way, environmental, regulatory, and statutory conditions have been addressed in the plans, specifications, and estimate.

With full AADD, RTL dates are set by the Districts. RTL Certification is required by the Division of Transportation Programming as part of the CTC allocation funds request. (This RTL certification section and the requirements of the RTL Certification are set by the Division of Transportation Programming and is included in the CCD Guide only for reference.)

# 2.2 RESPONSIBILITIES

# 2.2.1 PROJECT ENGINEER

The PE is responsible for the Plans, Specifications and Estimate and is the Engineer of Record signing and sealing the Title Sheet of the Plans. This also applies to consultant designed projects.

The PE certifies that the project meets all the criteria for RTL. By sealing and signing the final RTL Certification, the PE certifies that all applicable design, Right of Way, environmental, regulatory, and statutory conditions have been addressed in the plans, specifications, and estimate. By exercising responsible charge of RTL certification, the PE either personally performs the work or has determined the applicability of design criteria and technical recommendations provided by others before incorporating such criteria or recommendations (Business and Professions Code 6700-6706.3, and Board Rules and Regulations Relating to the Practices of Professional Engineering and Professional Land Surveying, California Code of Regulations, Title 16, Division 5, §§-400-476).

Business and Professions Code, section 6735.5 states: "The use of the word 'certify' or 'certification' by a registered professional engineer in the practice of professional engineering or land surveying constitutes an expression of professional opinion regarding those facts or findings which are the subject of the certification, and does not constitute a warranty or guarantee, either expressed or implied."

# 2.2.2 DESIGN ENGINEER OR MANAGER

The Design Engineer or Manager is the supervisor of the PE. The Design Engineer's or Manager's approval indicates the PE has the knowledge and experience to assure that the RTL requirements are complete.

#### 2.2.3 DISTRICT OFFICE ENGINEER

Assists the PE in preparing and submitting the RTL Certification and receives the completed RTL Certification for AADD projects.

#### 2.2.4 STRUCTURE OFFICE ENGINEER

Ensures that structure PS&E submittals and responses to draft contract comments to the district office engineers are prepared and processed in conformance with the Department's policies, procedures, adopted standards, and the requirements in this Guide.

# 2.3 COMPLETION AND SUBMITTAL OF RTL CERTIFICATION FORM

# AADD Projects

The PE obtains the RTL Certification Form from the DOE. The Form is available in the DOE AADD Database. With the assistance of the DOE, the PE completes and submits the signed and sealed form to DES-OE before the project is submitted for listing for advertisement.

# Informal Projects

A Director's Order is required for all informal projects, otherwise it is an AADD project. For informal projects, the PE completes the draft RTL certification form and the DOE submits the signed Form to the DES Deputy Chief - Office Engineer together with the plans, specifications and estimate (PS&E) for informal contract processing. The draft RTL certification identifies the completed requirements as well as pending requirements and target dates for completion. As the project is processed, DES-OE will verify the completion of the pending requirements. After verification by DES-OE that all applicable requirements are completed the DOE prepares and sends the Final RTL Certification to the PE to seal and sign and for the PE's supervisor signature of approval. DES-OE must receive a completed Final RTL Certification for a project to achieve RTL milestone.

# SECTION 3 CONSTRUCTION CONTRACT SERVICES AND AUTHORITY TO ADVERTISE

# 3.1 PURPOSE

This section describes the:

- DES-OE services to process a construction contract ready for advertisement.
- District requirements for the District Director to approve a construction contract for advertisement.

# 3.2 BACKGROUND

District/Region Directors are delegated the authority to approve and are solely responsible for authorizing the advertisement of construction contracts, excluding informal bid construction contracts, in accordance with state and federal law. Executive authorization to approve construction contracts for advertisement is based on the manager's staff having the knowledge and ability to produce full, complete, and accurate plans, specifications, and estimate (PS&E) in compliance with statutory requirements and Department policies.

# 3.3 RESPONSIBILITIES

# 3.3.1 DISTRICT DIRECTORS

 Certifies by signing the Authority to Advertise (A2A) form that the contract complies with statutory requirements and Department policies for advertisement. See Appendix C for the A2A form.

# 3.3.2 DES-OE, DEPUTY DIVISION CHIEF

 Assures that an independent review (Independent Quality Assurance (IQA)) is performed on a statistically significant number of construction contracts submitted for advertisement.

# 3.3.3 DES-OE, OFFICE CHIEF OF CONSTRUCTION CONTRACTING COORDINATION & QUALITY

 Provides feedback to districts on the performance measures indicated in the AADD Delegation of Authority agreement provided to each district/region.

# 3.3.4 PROJECT MANAGER

- Establishes and maintains project schedules. Resources project production through DES-OE based on established Workload Estimate Norm or based on agreement with DES-OE Office Chief of Construction Contracting Coordination and Quality Program.
- Resources and supports the District's functional units in delivering a full, complete, and accurate Construction Contract Submittal Package to the District Director.
- Takes a lead role in obtaining signoffs for Risk Management accountability checkpoints.
- Provides a signed Risk Register Certification to the DOE for RTL.

# 3.3.5 DISTRICT OFFICE ENGINEERS

- Ensures the quality of construction contract documents produced by the district.
- Delivers a full, complete and accurate construction contract submittal package to DES-OE.

# SECTION 4 CONSTRUCTION CONTRACT ADVERTISEMENT, AWARD AND BID OPENING

# 4.1 PURPOSE

This section provides an overview of the construction contract advertisement, bid opening and award process, roles and responsibilities.

# 4.2 BACKGROUND

DES-OE advertises, open bids and awards Minor A, major maintenance and major highway construction contracts.

# 4.3 RESPONSIBILITIES

#### 4.3.1 PROJECT MANAGER

- Ensures sufficient funds are available for construction contract advertising and award.
- Prepares, reviews or approves the contract award recommendation or request to reject bids.

# 4.3.2 PROJECT ENGINEER, DESIGN ENGINEER, AND CONSULTANT OVERSIGHT ENGINEER

Provides information or clarification needed by DES-OE and may prepare and sign contract award recommendation or bid rejection request.

# 4.3.3 DISTRICT OFFICE ENGINEER

- Acts as liaison for DES-OE and the district to resolve issues in a timely manner.
- Responds to bidder inquires.
- Prepares and submits addenda
- Prepares, reviews and either concurs with or approves contract award recommendation or request to reject bids.

#### 4.3.4 DIVISION OF ENGINEERING SERVICES-OFFICE ENGINEER

 Prepares final contract documents and posts on the Internet for advertisement.

- Advertises, opens bids and awards construction contracts to the lowest responsive and responsible bidder.
- Processes requests to reject bids.
- Responds to bid protests.
- Responds to requests for relief of bid.
- Responds to requests for subcontractor substitution.
- Facilitates pre-award qualification meetings, if required.
- Chairs good faith effort reconsideration meetings, if required.

# 4.3.5 DIVISION OF BUDGETS-OFFICE OF FEDERAL RESOURCES

Prepares the Federal Detail Estimate and provides a copy to DES-OE within ten days after receipt of the low bid BEES (copy of the estimate with the low bidder's prices, supplemental work, Department-furnished materials and contingencies).

#### 4.3.6 FEDERAL HIGHWAY ADMINISTRATION ENGINEER

- For project of Division interest, approves the plans, specifications and estimate in accordance with the Project Oversight Agreement.
- Approves major addenda in accordance with the Stewardship Agreement.
- Concurs with contract award or bid rejection in accordance with the Stewardship Agreement.

# 4.4 LISTING PROJECTS FOR ADVERTISEMENT

DES-OE identifies a weekly list of projects that are RTL and funded on a list of "Projects Tentatively Proposed for Advertisement." Funded is defined as funds allocated and approved by the Department & FHWA (if federally funded) including Federal Authorization (E-76) approval in an amount sufficient to cover the capital cost of construction. Projects identified on the list proceed to final bid document preparation and advertisement.

# 4.5 FINAL BID DOCUMENT PREPARATION

When a project is listed for advertisement, DES-OE prepares the final bid documents and during this period:

- The Office of Business and Economic Opportunity sets DBE or DVBE goals.
- Prepares the Notice to Bidders and Special Provisions, Bid book and the Information Handout if applicable.
- Reproduces the final delineated plans, the Notice to Bidders and Special Provisions, Bid book and the Information Handout if applicable.

# 4.6 ADVERTISEMENT

A project is ready for advertising when:

- Final bid documents are prepared and ready for posting on the Internet.
- Project has been advertised in the Department of General Services, California State Contracts Register.

DES-OE uses the following guidelines for setting advertisement dates for all construction contracts except informal bid contracts.

#### 4.6.1 ADVERTISING DATES

• Advertise on Mondays unless a Holiday (Government Code Section 6700-6720), then advertise on Tuesdays.

# 4.6.2 ADVERTISING DURATIONS

- Use durations concurred by the construction industry (AGC, UCON, & SCCA). Advertising periods typically range from three to seven weeks, or more depending on the complexity of the project.
- Do not count the week of Independence Day if holiday is during the week, the week of Thanksgiving, the last week of December, or the first week of January as part of the advertisement period.
- If advertising period is less than or equal to 6 weeks, do not count the
  week of Thanksgiving, the last week of December, or the first week of
  January as part of the advertisement period.
- If advertising period is more than 7 weeks and spans both events, count the week of Thanksgiving, the last week of December, and the first week of January as part of the advertisement period.

Durations are guided by the number of bid items.

Federal-aid projects require a minimum of 3 weeks of advertising unless an exception is granted by Federal Resources.

#### 4.7 ADDENDA

An addendum is issued to correct errors, omissions, or conflicts in the bid documents. Project changes after bid opening can only be made by either:

- Writing a change order during construction.
- Rejecting all bids and readvertising as a new project.

See Section 13, Contract Addenda, for instructions for preparing addendum letter.

# 4.8 BID OPENING

DES-OE follows the bid opening rules:

- 1. Opens bids on Tuesdays, Wednesdays, or Thursdays in Sacramento.
- 2. Does not open bids:
  - The day before or after a holiday.
  - During the weeks of Independence Day, Thanksgiving or the last two weeks of December.
- 3. Limits bid openings for construction contracts to:
  - One large Northern California and one large Southern California contract maximum per day.
  - One day apart for each type and for each region or district for landscape, building, or electrical contracts.
  - Small contract bid openings during the first week of January. Optimal average 10 bid openings per day. Optimal minimum 5 bid openings per day. Third and fourth quarters may have maximum of 15 bid openings per day.
  - One day apart for similar EAs (e.g., 07-257301, 07-257401) and for similar types of contracts in same county and route.

# SECTION 5 INDEPENDANT QUALITY ASSURANCE OF CONSTRUCTION CONTRACTS

# 5.1 PURPOSE

As required by the Decision Document delegating to District Directors the authority to approve construction contracts advertisement, DES-OE will perform IQA on a representative number of projects to ensure proper application of the Best Bid Standards (BBS) by the Districts and to monitor, report and update the BBS as needed.

DES-OE is responsible for performing Independent Quality Assurance (IQA) on construction contracts advertised for bid as an internal level of review in compliance with Government Code 13403.

This section provides information about the IQA program. The IQA program validates the proper application of the Best Bid Standards (BBS) by Districts as an integral part of the districts' Quality Management Systems (QMS).

# 5.2 **RESPONSIBILITIES**

# 5.2.1 DIVISION OF ENGINEERING SERVICES-OFFICE ENGINEER

- Performs an IQA review on a representative sample of construction contract documents after advertisement to ensure proper application of the BBS by Districts.
- Provides feedback to the Districts regarding the IQA findings.
- Recommends corrective action to achieve construction contract documents to meet the Department's standards and policies.

# 5.3 BEST BID STANDARDS (BBS)

The Best Bid Standards (BBS) are a compilation of legal, policy, and procedural references used in the preparation and review of construction contracts. The BBS evaluate the Department's construction contracts for accuracy, legal compliance, and cost effectiveness which results in lower administrative costs, expedited processing, and bids that are more competitive.

For the BBS Guide and other related QMP documents see: <a href="http://des.onramp.dot.ca.gov/office-engineer/office-construction-contracting-coordination-and-quality-program">http://des.onramp.dot.ca.gov/office-engineer/office-construction-contracting-coordination-and-quality-program</a>

#### 5.3.1 LEGAL BASIS FOR THE BBS

The BBS are necessary because the Department is required to provide accurate, legally compliant, and cost effective construction contracts for advertisement and award.

Public contracts must conform to:

- The State Contract Act
- The Government Code
- The Implied Warranty of Specifications
- The Implied Warranty of Full Disclosure
- The Implied Warranty Against Interference
- Federal Contract Administration Requirements (including Title 23)

The Department's contracts must also conform to the Streets and Highways Code.

The BBS, as well as Department policies and standards, are a result of Departmental and Federal agreements, and delegation of responsibility. Design staff maintain immunity for themselves and for the State by following these laws and requirements.

#### 5.3.2 RISK CATEGORY

Each BBS has an associated risk category color code (High = Red, Medium = Orange, and Low = Yellow) based on risk severity. The risk category identifies and prioritizes construction contract quality infractions. The risk category color codes are described as follows:

High (RED): The BBS infraction places the award of contract in jeopardy and the BBS infraction must be addressed by an addendum.

Medium (ORANGE): The BBS infraction is a deviation of Departmental policy, or may adversely impact the cost in construction and expose the Department to risks regarding the FHWA stewardship agreement. This BBS infraction should be addressed by an addendum.

Low (YELLOW): The BBS infraction that results in variance from Departmental practices and procedures. Yellow classifications provide feedback for improvement of future project submittals.

# SECTION 6 SPECIAL PROVISIONS

# 6.1 PURPOSE

This Section provides guidance for preparing the project special provisions. Preparation and QC/QA of the contract Special Provisions is the responsibility of the District.

# 6.2 BACKGROUND

The Standard Specifications, SSPs, and RSSs are the result of participation, extensive development, and concurrence from the Department's experts and applicable stakeholders. External stakeholders include industry, FHWA, and other agencies. Standard Specifications and SSPs are sponsored by owners who are responsible for the technical content.

See the Specification Style Guide and the Guide for Standard Specifications, SSPs, and Standard Plans for responsibilities, processes, and rules for the development of the standards.

Statewide specification uniformity makes bids more competitive and projects easier to administer. To expedite project delivery and minimize variation between projects, use the current SSPs published on the DES-OE Website. SSP editing must comply with instructions within the SSP.

# 6.3 RESPONSIBILITIES

Regardless of the construction involved, all projects are district projects. Districts have overall responsibility for the special provisions. Districts must ensure structure specifications do not conflict with other specifications. The details of responsibilities for the special provisions are as follows:

# 6.3.1 DISTRICT PROJECT ENGINEER

- Coordinates special provision work with the DOE from project development through award.
- Ensures SSPs are used and edited under the instructions in the SSPs.
- Ensures NSSPs included in the special provisions are necessary, developed, and reviewed/approved by the appropriate owners before submitting to the DOE.

#### 6.3.2 DISTRICT AND STRUCTURES SPECIFICATION ENGINEER

- District SE or PE signs, seals and dates the special provisions for district work.
- SOE SE signs, seals and dates the special provisions for structure work.
- Multiple specification engineers may be involved for work such as highway, traffic, pavement, structures, landscape, buildings, mechanical, water, waste water, electrical and architects.
- Assembles, edits, and uses QC for special provisions.
- Assists with NSSP development and verifies owner review/approval.
- Verifies consistency between the plans, Bid Item List, and special provisions.

# 6.3.3 DISTRICT OFFICE ENGINEER

- Provides QA to verify that the applicable SSPs are selected and correctly edited.
- Ensures NSSPs are necessary and consistent with the Specification Style Guide.
- Formats NSSPs.
- Coordinates Construction Contract Submittal.

#### 6.3.4 DISTRICT OFFICE ENGINEER SITE COORDINATOR

- Acts as the liaison with DES-OE for computer issues.
- Ensures that DOE computers are equipped with the tools and configuration necessary to submit Construction Contract Submittal.
- Acts as the point of contact in the district for specification-related computer problems.
- Takes responsibility for other computer-related functions (e.g., annual equipment inventory).

# 6.3.5 DIVISION CHIEF OF PROGRAM OR FUNCTION

- Designates specification owners.
- Provides resources to support the specification owners.

# 6.3.6 SECTION COORDINATOR

 For section coordinator responsibilities go to the Guide for Standard Specifications, SSPs, and Standard Plans.

# 6.3.7 SPECIFICATION OWNER

• For specification owner responsibilities go to the Guide for Standard Specifications, SSPs, and Standard Plans.

# 6.3.8 DIVISION OF ENGINEERING SERVICE-OFFICE ENGINEER, DEPUTY DIVISION CHIEF

 For DES-OE, Deputy Division Chief Responsibilities go to the Guide for Standard Specifications, SSPs, and Standard Plans.

# 6.3.9 DES-OE, OFFICE CHIEF OF OCCS

 For OCCS Office Chief responsibilities go to the Guide for Standard Specifications, SSPs, and Standard Plans. The Guide to Standard Specifications, SSPs, and Standard Plans can be found at: <a href="http://oe.dot.ca.gov/construction\_contract\_standards/specifications/guides/S3\_guide\_01-03-08.pdf">http://oe.dot.ca.gov/construction\_contract\_standards/specifications/guides/S3\_guide\_01-03-08.pdf</a>

# 6.4 SPECIAL PROVISIONS

# 6.4.1 GENERAL

Sections of the special provisions match the sections of the Standard Specifications.

#### 6.4.2 SECTIONS 1 THROUGH 9

SSPs for Sections 1 through 9 revise the general provisions of the Standard Specifications. Sections 1 through 9 apply to all contracts unless specified as applicable under certain conditions. If a bid item is not used for work required by Sections 1 through 9, payment is included in the contract bid items per Section 9-1.03, "Payment Scope", of the Standard Specifications. SSPs for Sections 1 through 9 include specifications for:

- Requirements and instructions to bidders
- Requirements for award and execution
- Control of the work and materials
- Relations with other entities
- Public and worker safety
- Start of job site activities
- Items for partial payment
- Payment, including measurement for payment

# **Cost-Plus-Time Bidding**

To determine if a project is required to have cost plus time bidding (formerly A+B bidding), use the guidelines published by the Division of Construction.

# Incentive/Disincentive Provisions

Incentive/Disincentive provisions require justification and are customized for each project. Work with DES-OE and the Division of Construction as early as possible to develop specifications.

# Supplemental Project Information and the Information Handout

The Department is required under contract law principles such as the Spearin and Superior Knowledge Doctrines to disclose to bidders information otherwise unavailable that is vital to contract performance.

Information included in the contract as supplemental project information, including the Information Handout, must be referred to from the special provisions because Section 2-1.06B of the Standard Specifications states that the information is made available as specified in the special provisions. The supplemental project information is made part of the contract by reference to it from the specifications and by the inclusion in the list of contract parts in Section 5-1.02 of the Standard Specifications.

# Project-Related Permits, Licenses, Agreements, Certifications (PLACs)

Comply with Chapter 13 of the PDPM. See website: <a href="http://www.dot.ca.gov/hq/oppd/pdpm/chap-pdf/chapt13.pdf">http://www.dot.ca.gov/hq/oppd/pdpm/chap-pdf/chapt13.pdf</a>

# Although PLACs are part of the contract:

- The plans and specifications must describe any work that the Contractor must complete. For example, if a PLAC states that a tortoise fence must be constructed, the plans and specifications must describe the tortoise fence.
- If a PLAC states that a requirement must be described in the plans or specifications, the plans or specifications must describe the requirement.
- If a PLAC describes options and the Department has chosen one option, the specifications must specify that option.
- If a PLAC provides requirements but does not designate the responsibilities of each party, the specifications must specify the responsibilities of each party.
- If a PLAC designates responsibilities to the Department, and the Department requires the Contractor to act such that the Department is in compliance with the PLAC, the specifications must specify that the Contractor must perform the act.
- For convenience to the Contractor, the specifications must include any time constraints included in the PLAC.

# **Working Days**

Districts are responsible for the submittal of the total project working days. Structures determine the number of working days for structure work. Districts merge the working days for highway and structure work. Round up working days to the nearest 5 days. Do not add days for work that can be done concurrently with the controlling activity. Do not add days for extra work. If necessary, days for extra work are added by change order.

Review time for contractor submittals (e.g., SWPPP, progress schedule, material lists, working drawings and plans, aggregates, concrete mix designs, asphalt mix designs, and other submittals specified in the special provisions, RSSs, or Standard Specifications)

For work that is not done concurrently with the controlling activity, consider:

- 7 or 14 day waiting period before placement of pavement markers on new hot mix asphalt
- Curing time for concrete

- 30-day minimum for obtaining railroad insurance
- Time specified for performance of utility work
- Landscaping, irrigation, and plant establishment work
- Collection of site specific seed for erosion control work
- Plants that must be propagated from plants on the job site
- Lead time for delivery of steel products, electrical equipment and special materials
- Special days or time constraints for traffic

# **Liquidated Damages**

Liquidated damages (LD) recover additional Department costs due to the Contractor's failure to complete the contract within the specified time and are based on the estimated cost of field construction engineering and field office expenses.

Section 8-1.10, "Liquidated Damages," of the Standard Specifications includes standard LD amounts for projects \$250 million or less. Section 8-1.10 also includes a standard liquidated damages amount for plant establishment work.

For a cost-plus-time bid type project, include the corresponding LDs based on the contract bid items total from the table in Section 8-1.10, Liquidated Damages, of the Standard Specifications and the road user cost (RUC). The LDs amount and RUC are the cost per day in the total basis for bid comparison purposes. See website for PD-14 for the Policy and Guidelines for use of Cost-Plus-Time Bidding: <a href="http://www.dot.ca.gov/hq/projdev/directive/PD-14-Cost-and-Time-Bidding.pdf">http://www.dot.ca.gov/hq/projdev/directive/PD-14-Cost-and-Time-Bidding.pdf</a>

For a unit price or Lump Sum (LS) bid type project, do not include LDs in the special provisions.

#### Internal Time Limits

Contact DES-OE Office of Construction Contract Standards for assistance.

#### Guidance

Internal time limits can be used to meet internal milestones without approval.

#### 6.4.3 SECTIONS 10 THROUGH 16

SSPs for Sections 10 through 16 revise general construction specifications of the Standard Specifications. These sections apply to all contracts unless specified otherwise. If a bid item is not used for work required by Sections 10 through 16, full compensation is covered by Section 9-1.03, "Payment Scope", of the Standard Specifications.

SSPs for Sections 10 through 16 include specifications for:

- Quality assurance
- Sustainable materials
- Temporary traffic control
- Water pollution control
- Environmental stewardship
- Existing facilities
- Temporary facilities

# 6.4.4 SECTIONS 17 THROUGH 88

SSPs for Sections 17 through 88 revise construction specifications of the Standard Specifications for specific bid items. SSPs for Sections 17 through 88 include:

- Grading
- Bases and pavements
- Structures
- Drainage
- Miscellaneous construction
- Traffic control facilities

# **6.4.5 SECTIONS 89 THROUGH 98**

SSPs for Sections 89 through 98 revise materials specifications of the Standard Specifications. SSPs for Sections 89 through 98 include:

Concrete

- Geosynthetic materials
- Asphalts and asphaltic emulsions
- Paints
- Epoxies

# 6.5 SPECIAL PROVISIONS FOR MINOR B CONTRACTS

For Minor B contracts, districts compile and submit the special provisions to the Division of Procurement and Contracts. If the project includes structures work, SOE submits their portion of the special provisions to the district.

# 6.6 ASSEMBLY OF SPECIAL PROVISIONS

Obtain the tools including macros for special provision assembly from the DOE site coordinator.

The first 2 digits of the item code set forth the specification sections that apply to the contract. Due to section reorganization, the use of one-time bid item codes and the creation of several new sections, cases where the first 2 digits of the item code does not match the specification section exist. In these cases, use SSP 1-1.01.

Use the first 2 numbers of the bid item along with the SSP index to assist in selection of SSPs that apply to a project.

Use the Special Provision (SP) template to create a document and insert the necessary SSPs. The SP template contains all the main section headings. Insert the SSPs under the appropriate heading in numerical order. Use the current template and SSPs published by OCCS.

Ensure that each bid item is covered by the Standard Specifications or the special provisions. Your review of the Standard Specifications, which includes the revised standard specifications, is critical. If a work component is not covered by the Standard Specifications, add the appropriate SSP. If an appropriate SSP does not exist, create an NSSP.

Use the 2010/2015 special provision template to create NSSPs for 2010/2015 projects. These templates are available at the DES-OE Website.

#### 6.7 SPECIAL PROVISIONS FOR BUILDING CONSTRUCTION PROJECTS

Building construction projects are construction or remodeling work which includes roadside rest areas, maintenance stations, vehicle inspection facilities, equipment buildings, toll plazas, etc.

Do not use a bid item for mobilization if the LS price of the building work is greater than 50 percent of the total bid items. Mobilization is included in the LS price for the building work.

# 6.8 EDITING AN SSP

Use the guidance in Appendix G.

Follow the instructions included in an SSP. If you must add or delete language not covered by the SSP instructions, follow the procedure for an NSSP.

For provisions that require a contact, provide the contact's title, address and phone number. Do not use proper names except in provisions for railroad specifications.

# **6.9 NSSP**

An NSSP is:

- · A specification that is not published by OCCS.
- An SSP with added or deleted language not covered by the SSP instructions.

Use of NSSPs should be limited and must be justified. Districts are responsible for documenting justification and obtaining specification owner approval for each NSSP unless the owner has delegated NSSP authority to the district.

For NSSPs the Engineer in charge of a project maintains the span of control by consulting with the SSP owner who is responsible for reviewing/approving the proposed NSSP and making recommendations.

For each project, the use of an NSSP requires review and/or approval by the owners and concurrence either by district or HQ Construction.

For an NSSP and associated project details, the written approval by the owner and concurrence by construction is a statement that the technical content of the NSSP is adequate.

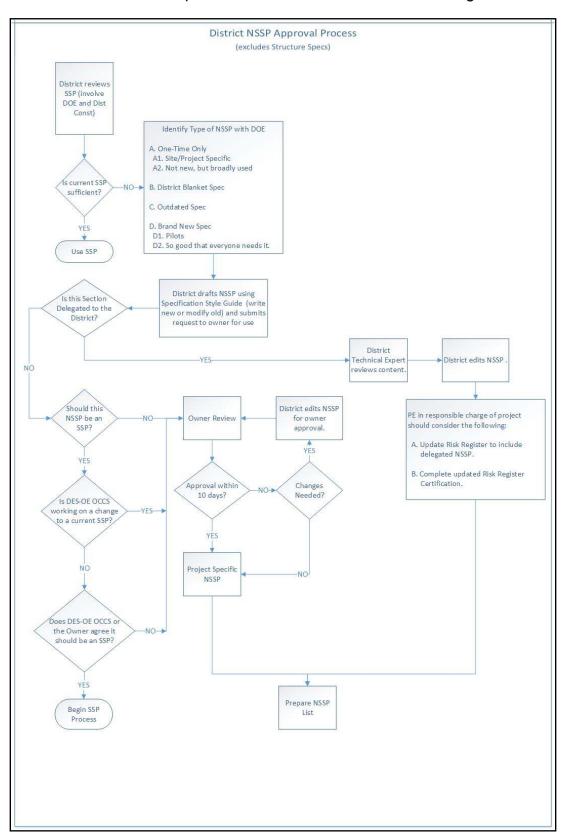
For a delegated NSSP and associated project details, the districts are accountable for the technical content of the NSSP and for consulting with the specification owner before district's approval of the NSSP. The districts should consider including the NSSP in the Risk Register.

#### 6.9.1 DISTRICT NSSP PROCESS

To create an NSSP comply with the following:

- For All NSSPs:
  - o Before developing an NSSP, confirm with the DOE that it is necessary.
  - The draft NSSP must conform to the Specification Style Guide. Request assistance and review by the DOE. If an NSSP is generated by editing beyond the instructions of a SSP, use the edit notation for SSPs shown in Appendix G. For an all-new specification, use the SSP template and place "ALL NEW," the date, and the author's initials in the header.
  - o Include the NSSP in the special provisions submitted to DES-OE. Check the field in the Construction Contract Submittal Memorandum noting that NSSPs are included in the project. The DOE incorporates NSSPs in the special provisions and submits a copy of each justification along with a copy of each NSSP.
  - Prepare the list of NSSPs for the project. Each NSSP must list when it received owner and construction concurrence or if it is a delegated NSSP.
- For all NSSPs from non-delegated Specification Sections:
  - Begin the NSSP development and review process early. Plan a strategy with the DOE for developing the NSSP with input from specification owners and stakeholders (e.g., Legal, Construction, and FHWA). To assist specification owners, stakeholders, and reviewers, provide a concise explanation of the purpose and need for the NSSP. Attach relevant plan sheets.
  - Request a review from the specification owners and District Construction. Check with the reviewers after the first week to see whether they have questions.
  - After obtaining approval from the owners and District Construction concurrence, e-mail copies of the NSSPs, and the justification summary to HQ Construction Engineering for IQA.
- For all NSSPs from delegated Specification Sections:
  - If the project has delegated NSSPs the Risk Register and Certification should be updated to note this.

The NSSP process is also described in the following flow chart.



#### 6.9.2 DISTRICT SPECIAL PROVISIONS

District special provisions are NSSPs that have been developed for use on a district-wide basis and are limited to situations where the standards do not adequately address a district's needs. To request new district special provisions, use the NSSP process.

#### 6.9.3 LOCAL AGENCY SPECIFICATIONS

Avoid the use of local agency specifications. If the use of the technical content from a local agency specification is necessary, process the specification as an NSSP.

#### 6.9.4 LOCAL INFRASTRUCTURE SPECIFICATIONS

Section 77 in the Standard Specifications is reserved for local infrastructure specifications. Examples of local infrastructure include city water and power, utility lines, and telecommunication cable. Submit these specifications as NSSPs for review by both DES-OE and HQ Construction. Obtain concurrence from DES-OE for format. Obtain concurrence from HQ Construction for contract administration. Staff in HQ and DES do not have technical expertise to sign and seal local infrastructure specifications. These NSSPs must be sealed and signed by the engineer from either the District, consulting firm, municipality, agency, utility, or company involved. The engineer must be registered in the State as a civil engineer or other applicable engineering classification.

# 6.10 PROPRIETARY PRODUCTS

Proprietary products include brand and trade name products and products so narrowly specified that only a single provider can meet the specification. When possible, avoid the use of proprietary products. Typically, the use of proprietary products requires project-specific details and an NSSP unless a SSP exists for that product. Proprietary products requirement apply to:

- Temporary and permanent work
- NSSPs tailored to proprietary products
- Products required by local entities

Pub Contract Code § 3400 and 23 CFR 635.411 govern the use of proprietary products.

Deputy Directive 45, New Product Evaluation requires District Directors to ensure that only those products evaluated and approved following Caltrans' policy and procedures are implemented and used in their respective districts.

- For use of proprietary products, the specification must include:
  - The term "or equal" unless not required by law
  - Company name, address, and phone number (unless readily available)
  - If applicable, the distributor name, address, and phone number
- The quoted price and its expiration date when only one manufacturer is specified. A price quote is not required if the product is available from multiple suppliers.

For use of proprietary products, the Job File must include:

- Approval for highway items by the District Director, Chief Deputy District Director, or District Deputy Director of Design.
- Approval for structure items by the DES Chief.
- Approved PIF for federal participation or a copy of the blanket PIF when one or two manufacturers are listed. For all Caltrans projects, irrespective of the funding sources, include an approved PIF. The PIF must document the needs and justification for the use of a proprietary product. Use the PIF database to create the PIF.
- Construction concurrence and a copy of the NSSP.
- Price quote documentation when one manufacturer is specified. If there are multiple suppliers for the proprietary product, the price quote is not required.
   Documentation must be signed by a responsible company official and includes:
  - Company name, address and phone number
  - Product price
  - Price expiration date of the price
  - Whether the price includes tax
  - Delivery location
  - Agreement to sell to any contractor

If a proprietary product is to be used experimentally and the project has federal funds, Districts submit the PIF to the Department's Federal Resources Office, Division of Budgets, for processing. PIFs will be forwarded for FHWA approval to the Chief, State Project Development Procedures and Quality Branch. Along with the PIF, include a work plan that indicates specific functional managers and units

assigned responsibility to objectively follow-up, evaluate, and document the effectiveness of the product. Further details on the work plan and approval procedure are found in the Construction Manual. For additional information see the Cost Effectiveness/Public Interest Finding Guidelines found at <a href="http://oe.dot.ca.gov/plans">http://oe.dot.ca.gov/plans</a> specifications and estimate/guides and manuals/PIF Guidelines Oct 2013a.pdf

# 6.11 RAILROAD INVOLVEMENT

Preparation of railroad agreements takes considerable time. As soon as possible, the project engineer must contact District Right of Way for confirmation of involvement of a railroad.

Typically the railroad is involved when work is in or over the railroad right of way. This should be considered even for minor work such as attaching guard railing to the abutment of an underpass, jacking a pipe beneath the railroad roadbed, or entering railroad property for access to the work or to construct a fence.

If there is a railroad shown on the Title Sheet of the project plans, contact District Right of Way.

District Right of Way provides the information to complete the railroad provisions before construction contract submittal.

Include an electronic copy of railroad provisions with the construction contract submittal to DES-OE. Railroad provisions will be added to the contract as supplemental project information. List railroad provisions in SSP 2-1.06B.

# 6.12 ALTERNATIVE MATERIALS AND CONSTRUCTION METHODS

Department policy is to allow optional materials and construction methods whenever feasible. In some cases it may also be necessary to include alternative bidding when the payment of the item involved is changed because of the alternative, e.g., steel bridge versus concrete bridge or different types of seal coats. Some SSPs include alternatives and therefore are not to be revised to eliminate predetermined options.

# 6.13 MATERIALS ELIGIBLE FOR PARTIAL PAYMENTS

If materials meet the criteria for progress payment, list the description in SSP 9-1.16C from the following table. Similar bid items may be grouped to reach the threshold values described in the SSP.

## **Materials Eligible for Progress Payments**

Eligible Materials
Backflow Preventer Assembly Enclosures
Backflow Preventers
Barriers (except concrete barriers)
Camera Assemblies
Column Casings
Control and Neutral Conductors
Corrugated Steel Pipe Conduit
Crash Cushions
Crib Wall Members
Culvert Pipe
Drainage Pumping Equipment
Earth Retaining System
Edge Drain Pipe
Fences and Gates
Fiber Optic Cable
Fiber Optic Conduit
Field Units and Base Station
Filter Fabric
Ground Anchors
Horizontal Drain Pipe
Innerduct
Irrigation Booster Pumps

Eligible Materials			
Irrigation Controller Enclosure Cabinets			
Irrigation Controllers			
Irrigation Pump and Equipment			
Isolation Casings			
Lighting Fixtures			
Luminaires			
Metal Sign Structures (including contractor furnished sign panels and changeable message sign structure)			
Miscellaneous Bridge Metal			
Miscellaneous Drainage Facilities			
Miscellaneous Iron and Steel			
Miscellaneous Metal			
Overside Drains and Appurtenances			
Pavement Dowels			
Pavement Markers			
Pavement Reinforcing Fabric			
Piling (except CIDH Piling)			
Pipe (Irrigation Systems)			
Plastic Lumber			
Precast Concrete Members			
Prefabricated items that typically take more than 60 days to fabricate and ship to the job site.			
Prestressing steel for cast-in-place members, sealed packages only, and prestressing ducts and anchorages (for structures that have an estimated value exceeding \$500,000.)			

Eligible Materials
PTFE and PTFE Spherical Bearings
Pumping Plant Electrical Equipment
Pumping Plant Equipment
Pumping Plant Metal Work
Railings
Reinforcement
Rock Slope Protection Fabric
Sewer Pipes and Appurtenances
Signal and Lighting Standards
Signal Cabinets
Signal Heads and Mounting Brackets
Soil Nail Assemblies
Sound Wall (Masonry Block, Precast Concrete, Panels)
Splice Vaults
Sprinklers
Structural Plate Installations
Structural Steel
Timber
Type B Joint Seals and Joint Seal Assemblies
Underdrain Pipe
Valves
Welded Steel Pipe
Welded Steel Pipe Conduit

#### 6.14 CLIMATE AREAS

The Websites for the highway environmental areas and the structure freeze thaw areas are:

## **Climate Areas**

Memo to Designers 8-2, "Protection Against Deicing Chemicals and Freeze-Thaw Environment":

http://www.dot.ca.gov/hq/esc/techpubs/manual/bridgemanuals/bridge-memo-to-designer/page/Section%208/8-2.pdf

Attachment A, "California State Highway Environmental Areas": <a href="http://www.dot.ca.gov/hq/esc/techpubs/manual/bridgemanuals/bridge-memo-to-designer/page/Section%208/8-2.A.pdf">http://www.dot.ca.gov/hq/esc/techpubs/manual/bridgemanuals/bridge-memo-to-designer/page/Section%208/8-2.A.pdf</a>

Attachment B, "California State Highway Listing by Environmental Area and Post Mile":

http://www.dot.ca.gov/hq/esc/techpubs/manual/bridgemanuals/bridge-memo-to-designer/page/Section%208/8-2.B.pdf

## SECTION 7 PREPARING THE PROJECT COST ESTIMATE

## 7.1 PURPOSE

This section provides guidance for preparing the project cost estimate.

## 7.2 BACKGROUND

Prepare the project cost estimate using the Department's best cost forecasting capabilities and BEES. The BEES printout of the project cost estimate is called the engineer's estimate.

Documents pertaining to this section include:

- Basic Engineering Estimating System (BEES) User Guide and Reference Manual
- Certification of Project Cost Estimate, memorandum signed by Robert Pieplow, dated January 5, 2012
- PD-04 Project Contingencies and Supplemental Work, project development directive

The project cost estimate includes:

- Bid item quantities, units of measure, and item costs
- Supplemental work items and costs
- Department-furnished materials costs
- Department expense costs
- Contingencies
- Funding segregation with identification of funding participation levels

The amount of allocated funds should not influence the estimate. Reducing the estimate to be within the allocated amount or within the limit for projects will not reduce bids. Bid overruns can cause serious problems such as delay of award, rejection of bids, and re-advertisement.

Project construction funds (capital outlay) are only for project improvement and not for maintenance.

Construction contracts must not include purchasing supplies or equipment for the Department. State law prohibits using capital outlay funds for such purchases. For example, it is prohibited to require the Contractor to provide a changeable message sign for Department use either during construction or after construction is complete.

## 7.3 RESPONSIBILITIES

#### 7.3.1 GENERAL

Details on responsibilities for approval of supplemental work and nonstandard contingencies are in the Project Development Directive PD-04 Project Contingencies and Supplemental Work.

FHWA approval is required on federal-aid projects for items not on the FHWA pre-approved supplemental work list.

For Federal aid projects, FHWA approval is required for contingencies (1) greater than 5 percent and (2) when the increase in contingencies is greater than \$200,000.

## 7.3.2 PROJECT ENGINEER

- Generates the District portion of the project cost estimate.
- Ensures the project cost estimate is complete and accurate including:
  - Complete and accurate bid item quantities for both district and Structures work.
  - Consistency between the plans, specifications, and estimate.
  - Appropriate final pay designations.
- Coordinates with SOE for common bid items.
- Obtains approval for supplemental work when this work totals more than
   5 percent of the project cost estimate.
- Ensures accurate funding segregation when applicable.
- Prepares justification for Department-furnished materials and Department expenses.

## 7.3.3 OTHER FUNCTIONAL DISTRICT ENGINEERS

• The other function district Engineers submit complete and accurate contract quantities for their portion of the project to the Project Engineer.

## 7.3.4 STRUCTURE OFFICE ENGINEER

- Generates the portion of the project cost estimate for structures work.
- Ensures their portion of the project cost estimate is complete, accurate, and consistent with the plans and specifications.
- Ensures the final pay designation is appropriate for Structures work.
- Coordinates with the District for common bid items and working days.
- Reviews the combined project cost estimate and resolves issues with the District as necessary.

## 7.3.5 DISTRICT OFFICE ENGINEER

- Verifies the project cost estimate is complete and consistent with the plans and specifications.
- Coordinates with SOE on combined bid items and working days.
- Verifies final pay designation is appropriate.
- Verifies the funding segregation is complete and accurate.

## 7.3.6 DIVISION ENGINEERING SERVICES, OFFICE ENGINEER

- Assigns one-time item numbers for nonstandard items.
- Locks BEES after project is received in DES-OE and listed for advertisement.
- Maintains standard bid item codes.

## 7.3.7 DESIGN ENGINEER OR PROJECT MANAGER

- Ensures the estimate complies with standard contingencies, preapproved supplemental work items, and standard limits on supplemental work costs.
- Ensures the PE obtains applicable approvals.

#### 7.3.8 DISTRICT PROJECT DELIVERY DEPUTY

When delegated, the District Project Delivery Deputy must certify project cost estimates over \$1,000,000.

## 7.3.9 DISTRICT DIRECTOR

- Certifies the project cost estimate for all projects.
- Recertifies the project cost estimate for certifications.

## 7.4 BASIC ENGINEERING ESTIMATING SYSTEM (BEES)

#### **7.4.1 GENERAL**

This system:

- Provides data files required for the project information systems and analysis (PISA).
- Provides data needed by the bid opening and progress pay systems.
- Produces segregated estimates according to funding sources.

For each project BEES limits the maximum number of bid items to 350. BEES limits the combined number of supplemental work items and state-furnished items to 50.

For projects that include Structures work, the DOE submits a project cost estimate that is a combination of the estimate from the District and SOE. Structures work may include railroad work, temporary structures, supplemental work. Department-furnished items, and Department expenses. For a given project, BEES permits separate storage of the District from the SOE estimate. The District and SOE must use the same EA and keyword when inputting their portion of the items into BEES. Phase 1 must be used for the EA. If the District and SOE do not use the same EA and keyword, BEES cannot generate a combined estimate. District files are designated with "H" and SOE files are designated with "B". The combined file is designated with "C". Each office is responsible for completing and updating their portion of the estimate. BEES reports may be generated for just the "H" or "B" portions or may be generated for the combined "C". When BEES generates a combined estimate, the quantities for District and structures are integrated. If District and SOE estimates have the same bid item but different unit prices, the District unit price prevails. Before finalizing the estimate, District and SOE estimators should concur on the pricing for items with the same bid item.

The PE reviews all items and ensures that quantities and costs are not duplicated. Duplication may occur for items such as temporary railing or retaining walls. For project with work where a portion of an element (such as a retaining wall) is designed by both the District and Structures, the same bid item should be used. If the Structures portion is designated as final pay, final pay designation should also be used for the District portion. In the rare case where it is appropriate to pay for the same work with different bid items, the plans must clearly show the limits for payment.

If federal or local funding is included, segregate the estimate before submitting the construction contract to DES-OE under Section 7.11.

DES-OE locks the estimate in BEES when the Construction Contract Submittal is received by DES-OE.

## 7.4.2 ROUNDING QUANTITIES

The project contains two kinds of quantities:

- Actual calculated quantities shown on the plans to help the Contractor and the Engineer complete the project.
- Rounded quantities shown on the bid item list to simplify bidding.

Quantities on plans must be actual calculated quantities and never rounded quantities.

When applicable, round the quantities in BEES and on the bid item list. Round using the total quantities and not partial quantities or subtotals. Typically, quantities should be rounded up. Do not round such that the quantity is changed by more than 25 percent. Do not round structure bid items.

Do not round final pay quantities unless the quantity is more than 5. In this case, round up to the nearest whole number. For example, round 6.3 to 7 do not round 4.3.

For quantities greater than 1,000, round to no more than three significant figures. The significant figures are those figures of a number that begin with the leftmost figure and extend to the last nonzero figure to right. For example:

- 5,050 and 1,620,000 are correctly rounded.
- Round 1,103 to 1,110.
- Round 2,234,541 to 2,240,000.

For quantities less than 1,000, round to no more than two significant figures. For example, round 426 to 430.

Avoid decimal quantities. Consider using a unit of measure that avoids this problem such as using 1,000 lb. and not 0.5 ton. Do not use more than 1 decimal place in a BEES quantity. Currently the programs used for opening bids and accounting during construction accept only 1 decimal place. Any quantity with two or more decimal places must be corrected prior to bid opening, even if an addendum is required.

It is not always possible to eliminate using one decimal place for small quantities. For example, 1.4 lb. of seed for erosion control cannot be rounded up to 2 lb. or down to 1 lb. without changing the quantity by more than 25 percent. For decimal quantities less than 5, round to one decimal place. For quantities of 5 or more, round to the nearest whole number.

## 7.5 ESTIMATING COSTS

#### 7.5.1 GENERAL

The estimate must be current, and complete at RTL milestone and must be the final project cost estimate that is submitted with the construction contract package.

If the CTC votes on the project funding, the project cost estimate should be reviewed and updated before being listed for the CTC vote. Data entered into the BEES should not be changed after the CTC vote.

If a CTC vote is not required, estimates should be reviewed and updated as necessary before funds are allocated. Data entered into the BEES should not be changed after funds are allocated.

Estimating is not an exact science and analysis should include evaluation of the following issues:

#### a. COST FLUCTUATION

The project cost estimate must be reviewed and corrected as conditions change and costs fluctuate.

Construction costs may fluctuate due to issues including:

- Material shortages which may develop at unexpected intervals and cause an increase of the material prices.
- Wage increases which typically occur at a somewhat predictable rate.

- Time of the year that the contract is advertised.
- Changing economic conditions and indications.

## b. TRAFFIC CONDITIONS

Traffic conditions can have a significant effect on costs. Adjust unit prices to reflect special difficulties, dangers, and expenses caused by traffic. Bidders are inclined to raise their bids for projects with difficult traffic conditions.

## c. RESTRICTIVE WORK HOURS OR METHOD OF WORK

Restricting the working hours or the method of work on a project may have a major effect on costs. If the special provisions limit work to nighttime or short shifts, increase unit prices to reflect:

- The cost of premium wages for night work
- Premium payment for partial shifts
- General decreases in productivity and efficiency

Night work for HMA can be especially expensive where small quantities are involved. HMA plants do not usually operate at night. Small quantities and night deliveries increase the unit prices.

## d. SMALL QUANTITIES

Small quantities of work and materials will nearly always have higher unit prices than identical work in larger quantities. Equipment and labor must be distributed over a much smaller base. Production is usually inefficient and slow for small quantities and this also increases unit costs.

## e. SEPARATED OPERATIONS

Separated operations will generally have higher unit prices. Staged construction, specified order of work, or scattered locations may require portions of the work to be constructed as separate operations. Each operation may require separate equipment and labor. In this case the unit prices should then be based on the smaller operations and not on the total quantities for the project. Consider separated operations when estimating mobilization.

#### f. HANDWORK AND INEFFICIENT OPERATIONS

Handwork, small, and low production rate operations (even though equipment may be used) have higher unit costs than work adaptable to machine operation, mass production, and high production rates.

## g. ACCESSIBILITY

Difficult job site access increases cost.

Work on an existing interchange may require long out-of-direction movements by construction personnel and equipment if the Contractor must observe one-way ramp movements or enter or leave at restricted locations (such as only ramps or interchanges). Hauling materials for earthwork under these conditions can be especially expensive.

Work at the top of retaining walls, on slopes, or where workers must climb slopes to get to the work area is expensive. This is true regardless of whether the operation is handwork or is done by equipment. Work that is easy to do on level ground or a gentle slope may be almost impossible to do on steep slopes.

## h. GEOGRAPHIC LOCATION

Geographically remote locations usually result in higher unit prices.

Where applicable, the unit prices should include consideration of the Contractor's costs for the worker's subsistence.

The source of supplies and the distance to the job site from these sources should also be considered.

#### i. CONSTRUCTION SEASON

The time of the year when the Contract is awarded may affect cost. Contractors are usually more available for work early in the spring and will therefore bid more competitively at that time. Later in the spring or summer, many contractors have on-going contracts to keep them busy and therefore tend to bid higher or not at all.

For contracts awarded near the end of summer or end of the construction season for a given location, it is important to determine if construction can be finished before the construction season ends. If the Contract cannot be finished before the end of the construction season, bidders increase their bids to cover work delays due to bad weather and winter suspension. Even if bidders reasonably expect to finish before winter, they increase their bids to cover costs from delays due to early

rains. This is especially true if construction involves work in or around drainage channels, rivers, rainy areas, and snow areas.

#### 7.5.2 PRICING METHODS

#### a. GENERAL

There are two methods commonly used for estimating prices. One method uses previous bid prices as a basis for establishing prices. The other method makes a complete analysis of production rates, labor costs, and material costs. One or both methods can be used.

## b. PREVIOUS BID PRICES METHOD

Basing estimates on previous bid prices is probably the most widely used and the most practical method. When using this method, consider:

- Using approximately the same size and type of projects that have similar quantities for individual items.
- Using an average price from the 3 lowest bidders, using prices from the 2nd lowest bidder, or using the District 8 cost database.
- At a minimum, revising previous bid prices by the projected change in the California Construction Cost Index between the date of the old bid and the anticipated date of the new bid. See Section 8 for typical schedules to calculate the time to the probable new bid opening date.
- Adjusting the reference bid price to reflect conditions of the project, such as type of terrain, geographical location, soil, traffic, and other related factors.
- Not using lump sum bid prices or unit prices for items of work (such as culverts) that include varying amounts of other related work.
- Using comparable months. Seasonal work items vary by the time of year.

To estimate the price of individual items, start with bid prices from similar projects. Pricing tools available on the DES-OE Internet site include:

- Contract Cost Data. These books are published annually.
- Quarterly California highway construction cost index

- Asphalt price index
- Bid summary results from projects with bid opening (1) within the last six weeks (2) less recent

Item cost databases are available on the DES-OE Intranet site. These FileMakerPro databases containing all contract items with quantities and prices used in the past four quarters and the past several years, listed by item code number. District 8 maintains a comparable Intranet site that does not require FileMaker Pro.

The scheduling chart showing average times from submittal of construction contract to award is available on the DES-OE Intranet site. This can be used to help determine the time of year that bid opening will occur.

## c. COMPLETE ANALYSIS METHOD

This method is not usually practical for estimating all bid items. It may be practical for estimating earthwork items where rock or unusual haul is required, or for lump sum items such as signals and lighting. Use the following steps:

- 1. Compile a materials list.
- 2. Estimate materials costs using available price lists.
- 3. Estimate production rates.
- 4. Determine labor and equipment costs based on production rates.
- 5. Calculate the subtotal.
- 6. Add overhead and profit.

It is important to consider subsistence cost and premium pay for overtime on night work. On larger projects with long time limits, determine if the majority of a bid item is paid early or late in the project. To estimate items that cannot be completed early in the project, it may be necessary to forecast wage scales and material cost increases to accurately estimate bid item costs.

#### 7.6 BID ITEMS

## **7.6.1 GENERAL**

Bid items are listed in numerical sequence. Item descriptions must match the item descriptions in the Coded Contract Items Lists shown on the DES-OE Website.

The Coded Contract Item list is reviewed periodically. Items that are no longer supported by the specifications are deleted and items required by revised and new specifications are added.

## 7.6.2 TIME-RELATED OVERHEAD

The bid item for TRO compensates the Contractor for overhead expenses such as those for a field and home office. Include this bid item on all projects over \$5 million and with at least 100 working days.

The standard for TRO is 10 percent of the total of the all bid items except for mobilization (i.e., do not include mobilization, supplemental work, and contingencies when calculating TRO).

Unique project requirements may justify a nonstandard TRO calculation. Justification for a nonstandard TRO calculation must include recent cost data from similar projects and consideration of project size, duration, location, and other applicable unique conditions. The PE must obtain approval from the Chief, Division of Construction, or District Director for use of a nonstandard calculation of the TRO.

## 7.6.3 MOBILIZATION

The bid item for mobilization compensates the Contractor for preconstruction construction expenses due to preparatory work and assembly of staff.

Include mobilization for contracts with at least 50 working days not including plant establishment days. Mobilization may be included for projects with less than 50 days if the work is primarily structures work. Mobilization is not typically included on contracts that are mostly building work.

BEES automatically calculates the amount for mobilization based on the percentage entered. Enter the percentage into BEES as a decimal such as 0.1 for 10 percent or 0.02 for 2 percent. The percent for mobilization should be based on the evaluation of cost data from recent similar projects and other considerations such as project scope, location, and unique conditions.

#### 7.6.4 NONSTANDARD ITEMS

If the work is not accurately represented by a standard bid item, you may establish a nonstandard bid item. Ensure that payment is covered by the specifications, and if necessary develop an NSSP to cover payment. For use of nonstandard bid items, consult with the owner of the associated specification.

Nonstandard bid items must be consistent in style with standard bid items.

To create a nonstandard bid item in BEES:

- Find a bid item code (1) not already being used for the Contract and (2) with the most similar bid item description and most applicable unit of payment. Use only the units of measure and abbreviations shown in the BEES manual.
- Make the bid item code nonstandard by adding "A" to the end (such as 390104A).
- Do not create a nonstandard bid item for an item that was on the bid item list and now is not on the list. If the item no longer exists in the bid item list then it has been deleted.
- Add nonstandard items to the table in SSP 1-1.01.

Before advertisement, DES-OE replaces the nonstandard bid item code with a unique, one-time bid item code. These one-time bid item codes are shown in the bid item list in the Bid book. DES-OE corrects SSP 1-1.01 with the final nonstandard bid item codes.

### 7.6.5 FINAL PAY DESIGNATION

Bid items may be designated as final pay if the quantity can be independently verified.

Final pay bid quantities must be correct. The Contractor will not receive payment for less than or more than the quantity shown. Do not round the quantities for items designated as final pay, except as described in Section 7.4.1.

Show the final pay designation on the bid item list for both nonstandard and standard bid items.

Do not show the final pay designation on the plans.

Use Table 7-1 to determine which items may be designated as final pay.

Table 7-1

Guidance for Final Pay Designation

Items	Work
Architectural Treatment	Bridges, Walls
Bar Reinforcing Steel	Box Culverts and Wingwalls
Bar Reinforcing Steel (Bridge)	Bridges
Bar Reinforcing Steel (Bridge, Retaining Wall, Soundwall, Tunnel, or Pumping Plant)	Bridge, Retaining Wall, Soundwall, Tunnel, or Pumping Plant
Bridge Deck Drainage System	Bridges
Channel, Stripping or Tunnel Excavation	Channels, Tunnels
Class 1 Concrete (Structure)	Box Culverts and Wingwalls
Communication Conduit (Bridge)	Bridges
Concrete Closure Wall	Bridges
Conduit	Communication
Deck Seal and waterproofing	Bridges
Earth Retaining Structure	Retaining Structures
Erect Precast Concrete	Bridge
Erect Structural Steel Bridge	Bridges
Furnish and Install Sign Structure (Tubular, Truss, Lightweight, etc.)	Overhead Sign Structures
Furnish Structural Steel Bridge	Bridges
Grind Bridge Deck	Bridges
Handrailing	Bridges
Minor Concrete (Minor Structure)	Drainage Inlets and Pipe Headwalls
Miscellaneous Iron and Steel	Frames and Grates
Miscellaneous Metal (Bridge)	Bridges
Miscellaneous Metal (Restrainer)	Bridges
Miscellaneous Metal (Retaining Wall)	Retaining Wall
Miscellaneous Metal (Tie Rod, Restrainer)	Bridges
Pervious Backfill Material	Bridges, Retaining Walls
Pipe (Supply Line)	Irrigation Systems
Place Deck Overlay (Concrete)	Bridges
Place Polyester Concrete Overlay	Bridges
Pumping Plant Metal Work	Pumping Plant
Railings and Concrete Barrier on Structures	Bridges
Rock Slope Protection measured by CY	RSP
Seal Concrete Surface	Bridges

Items	Work
Shotcrete	Bridges, Walls
Sound Wall (Masonry Block)	Walls, Bridges
Sprinkler Control Conduit Bridge	Bridges
Structural Concrete, Approach Slabs (except Type R)	Bridges
Structural Concrete, Bridge	Bridges
Structural Concrete, Bridge Footing	Bridges
Structural Concrete, Deck Overlay	Bridges
Structural Concrete, Pier Column	Bridges
Structural Concrete, Pumping Plant	Pumping Plants
Structural Concrete, Retaining Wall	Retaining Walls
Structural Concrete, Sound Wall	Sound Walls
Structural Concrete, Tunnel	Tunnels
Structural Concrete, Tunnel Footing	Tunnels
Structural Steel	Bridges
Structural Steel (Bridge)	Bridges
Structure Backfill (Bridge)	Bridges
Structure Excavation (Bridge, Tunnel)	Bridges, Tunnels
Timber and Lumber	Bridges, Retaining Walls
Treat Bridge Deck	Bridges

## 7.7 SUPPLEMENTAL WORK

## 7.7.1 GENERAL

Supplemental funds are used for either (1) work that may or may not be required to complete the project, or (2) work that is not bid. When approved, supplemental funds may be used for work that is anticipated but cannot be quantified. Supplemental work must be within the scope of the Contract.

Do not use supplemental items to:

- Cover an incomplete design or lack of quantities.
- Add more contingency funds.
- Pay for work that should be paid by maintenance funds. Maintenance work is not eligible for federal funding.
- Pay for work not performed by the Contractor such as the inspection of work by the railroad.

Supplemental work must be identified, justified, and approved. Approval request forms and procedures are provided in project development directive PD-04 Project Contingencies and Supplemental Work. The items for supplemental work are numbered 066XXX. Items pre-approved by FHWA are shown in Table 7-2:

Table 7-2
FHWA Pre-Approved Supplemental Work Items
(Approved 11/19/13)

/hb			
Item Code	Work Description Specification section	Guidance	
066094	Value Analysis Section 4-1.07C	Use on nonbuilding projects when the total of the bid items is over \$5 million. Estimate \$10,000 to reimburse the Contractor for 50% of the value analysis workshop costs.	
066610	Partnering Section 5-1.09	Use when the total of the bid items is over \$1 million. Estimate the cost using the guidance in Section 7.7.2.	
066921	Dispute Resolution Advisor Section 5-1.43E	Use when the total of the bid items is at least \$3 million and not more than \$10 million and if the project has 100 or more working days. Estimate the cost as \$5,000.	
066919	Dispute Resolution Board Section 5-1.43E	Use when the total of the bid items is over \$10 million. Estimate the cost using the table in Section 7.7.3.	
066015	Federal Trainee Program Section 7-1.11D	Use for federally funded projects with at least 100 working days. Estimate the cost using the guidance in Section 7.7.4	
066008	Incentive Payments Section 8-1.10	Use when authorized for encouraging early project completion. Estimate using Delegation of Authority for Use of A+B Bidding and Incentive/Disincentive (I/D) Provisions, memorandum signed by Brent Felker, June12, 2000.	
066670	Payment Adjustments for Price Index Fluctuations Section 9-1.07	Use for projects with paving asphalt items. Funds compensate the Contractor for fluctuations in the statewide crude oil price index. Estimate using the guidance in Section 7.7.5.	
066070	Maintain Traffic Sections 12-1.03 & 12-3.01C	Use to compensate the Contractor for 50% of the cost for flagging and 100% for other traffichandling equipment and devices ordered by the Engineer.	

066597	Storm Water Sampling and Analysis Section 13-3	Use to compensate the Contractor for sampling storm water as sampling fluctuates with storm frequency and severity.
066595	Water Pollution Control Maintenance Sharing Sections 13-1, 13-5.04, 13-6.04, 13-7.04	Use to compensate the Contractor for 50% of the cost to maintain temporary water pollution control items identified as approved BMPs on the Contract.
066596	Additional Water Pollution Control Sections 13-1, 13-2, 13-3, 13-7	Use to compensate the Contractor for overruns and additions when abnormally heavy rainfall occurs during the project and estimated BMPs are inadequate.
066016	Just-In-Time Training (JITT)	Used for continuously reinforced concrete pavement (CRCP), or if District Construction recommends JITT for concrete pavement, then the Contractor provides JITT and the Department pays for half the cost of the training.
066041	Bird Protection	The Engineer orders the Contractor to construct exclusion devices, take nesting prevention measures, and remove and dispose of partially constructed and unoccupied, or perform any combination of these.

#### 7.7.2 PARTNERING

In order to effectively complete contracts to the benefits of both parties, the Department promotes the formation of "Partnering" relationships. Include supplemental funds in the estimate to cover the Department's required and potential share of the cost. Estimate the cost using Table 7-3 as a guide.

**Table 7-3 Partnering** 

Bid Item Total		Number of working days *		Supplemental funds
Over	То	Over	То	
\$1 million	\$10 million	0	50	\$7,000
\$1 million	\$10 million	50	150	\$12,000
\$1 million	\$10 million	150		\$20,000
\$10 million	\$25 million	0	200	\$20,000
\$10 million	\$25 million	200	300	\$35,000
\$10 million	\$25 million	300		\$50,000
\$25 million		0	400	\$50,000
\$25 million		400	600	\$70,000
\$25 million		600		\$90,000

<sup>\*</sup> Exclude plant establishment days.

## 7.7.3 DISPUTE RESOLUTION

When applicable include supplemental funds for either a dispute resolution advisor or a dispute resolution board. Do not include funds for both on the same contract.

## a. DISPUTE RESOLUTION ADVISOR

If the project bid item total is at least \$3 million and not more than \$10 million, and if the project has 100 or more working days, include the supplemental item for a dispute resolution advisor. The recommended costs \$5,000.

## b. DISPUTE RESOLUTION BOARD

If the project cost estimate is over \$10 million, and if the project has 100 or more working days, include the supplemental item for a dispute resolution board. Estimate the cost using the Table 7-4 as a guide.

**Table 7-4 Dispute Resolution Board** 

Total working days	Supplemental funds
100 to 200	\$7,500
201 to 400	\$15,000
401 to 600	\$22,500
601 to 800*	\$30,000*

<sup>\*</sup>Increase supplemental funds by \$7,500 for each additional block of 200 working days in conformance with the pattern shown above

## 7.7.4 FEDERAL TRAINEE PROGRAM

For federally funded projects with at least 100 working days, include supplemental funds for the federal trainee program. Trainee funds are required for each of the following work categories:

- Earthwork (except for imported borrow)
- Pile driving
- Portland Cement Concrete (except for precast concrete)
- Masonry
- Bar reinforcing and prestressing steel
- Structural steel erection
- Electrical
- Buildings

Use Table 7-5 to calculate the number of trainees for each work category:

**Table 7-5 Federal Trainee** 

Cost for work category	Number of trainees	Cost for work category	Number of trainees
400,000	0		
≥ 400,000	1	16,000,000	15
700,000	2	18,000,000	16
1,000,000	3	20,000,000	17
1,500,000	4	23,000,000	18
2,000,000	5	26,000,000	19
2,500,000	6	29,000,000	20
3,000,000	7	33,000,000	21
4,000,000	8	37,000,000	22
5,000,000	9	41,000,000	23
6,500,000	10	45,000,000	24
8,000,000	11	50,000,000	25
10,000,000	12	> 50,000,000	*
12,000,000	13		
14,000,000	14		

<sup>\* 25,</sup> plus 1 additional trainee for every \$5,000,000 over \$50,000,000

The number of federal trainees for the Contract is the sum from all work categories. Calculate the contract cost using \$800 per trainee.

#### 7.7.5 PAYMENT ADJUSTMENTS FOR PRICE INDEX FLUCTUATIONS

In order to limit the financial exposure of both the Department and the construction industry to dramatic swings in the crude oil prices, for all projects with HMA pavement, include supplemental funds for payment adjustments for price index fluctuations.

The calculated amount may vary substantially from the actual amount since the change in crude oil prices cannot be predicted with accuracy.

Estimate the cost using the formula:

Price Index Fluctuations = Fs x Qt x Ic

#### Where:

- Fs = Supplemental work allotment factor:
- Use 0.15 for projects with less than 250 working days
- Use 0.25 for projects with 250 to 500 working days
- Use 0.35 for projects with more than 500 working days
- Qt = Total estimated asphalt quantity contained in materials for pavement structural sections and surface treatments to be placed in the work. Use the formulas in specification section 9-1.07B.
- Ic = California Statewide Crude Oil Price Index. Use the current month's index. Update your estimate as close to advertisement as possible.

Include with your construction contract submittal:

- List of materials containing asphalt and the values used for X (percent asphalt content as specified in specification section 9-1.07B), such as:
- HMA:Xa =\_\_\_\_%
- Total estimated asphalt quantity (Qt) used for the supplemental item for price adjustments for price index fluctuations
- California Statewide Crude Oil Price Index month
- California Statewide Crude Oil Price Index

## 7.8 DEPARTMENT-FURNISHED MATERIALS

Items for Department-furnished materials are numbered 066XXX.

(Subject to Change)

FHWA has pre-approved the following Department-furnished items:

- Laminated wood box posts and metal caps
- Monument disks
- Traffic signal controller assemblies, including wired cabinets and loop detector units
- Changeable message signs and assemblies
- Salvaged material in stock, such as temporary traffic signals and flashing beacons
- Battery backup system (BBS), electronics assembly

If items on the FHWA pre-approved Department-furnished material list are included in a contract, the PE must sign a letter justifying the cost of each item and send it to the Office of Federal Resources. A copy of this letter must be included in the construction contract submittal.

For items not on the FHWA pre-approved list, the PE must generate a PIF. A new PIF is required for each contract.

## 7.9 DEPARTMENT EXPENSES

Department expenses are directly related to project construction and do not include work done by the Contractor. FHWA has approved the following Department expenses as eligible for federal reimbursement as shown in Table 7-6.

Table 7-6 FHWA Approved Department Expenses (Approved as of 9/24/15)

Item Code	Item Description	Guidance
066020	Railroad Work	Use for work done by a railroad agency.
066063	Traffic Management Plan - Public Information	Use for projects funded by capital outlay and on the State highway system. These funds are for traffic mitigation and public information strategies.
066062	COZEEP Contract	These funds are for the construction zone enforcement enhancement program (COZEEP) where compensation is paid to the California Highway Patrol. Verify cost with District coordinator. For rough cost use either (1) \$85/officer/hour and \$0.70/mile travel expense, or (2) \$90/officer/hour and no travel expenses.
066871	Electrical Service Connections	These funds are for providing electrical meters and connections at the job site to (1) temporary facilities and (2) permanent Department facilities.
066893	Telephone Service Connection	These funds are for providing telephone connection at the job site to (1) temporary facilities and (2) permanent Department facilities.
066901	Water Service Connection	For convenience, the Contractor is allowed to use water from Department facilities where available within project limits for landscape work. Since the water is not free to the Department, it has to be charged to the project as a Department expense. Where the Department cannot provide water, the Contractor directly pays the water provider.
066915	Disposal of Wood Waste (Guard Rail)	This fund is to cover the cost of the Generator Fee charged by the Board of Equalization for projects with a Generator Identification Number and that produce more than 10,000 pounds of treated wood waste.
066105		Expenses necessary for Resident Engineer and staff to have an office close to the jobsite

	Resident Engineer's Office Rental and Maintenance Cost	for administration of the contract. The cost of the office would be distributed proportionally among the projects involved according to their estimated use of the office.
066916	Annual Construction General Permit Fee	Payment for National Pollutant Discharge Elimination System (NPDES) permits, annual fees, as a Construction General Permit (CGP). The payment covers the permit for required annual fee for each active construction project based upon its disturbed soil area in excess of 1 acre.
066580	Laminated Wood Post (Roadside Sign)	Due to order delays of not commonly available materials, the Department purchases this material in large quantities and it is furnished to the Contractor to avoid project delays.
066813	Monument Disk	Projects only require small quantities of monument disk. To ensure statewide uniformity, it is beneficial to the Department to purchase and stock them in volume.
066840	Traffic Signal Controller Assembly	Due to small project quantity requirement, and to ensure statewide uniformity, compatibility and maintenance and to avoid project delays due to fabrication, delivery, testing, operational unit programming, modifications, and retesting volume purchase benefits the Department.
066578	Portable Changeable Message Signs	Due to small project quantity requirement, and to ensure statewide uniformity, compatibility and maintenance and to avoid project delays due to fabrication, delivery, testing, operational unit programming, modifications, and retesting volume purchase benefits the Department.
066870 066890	Salvage Existing Electrical Material Salvage Electrical Equipment	Salvaging and recycling of reusable materials is the Departments resource conservation effort.

A PIF is not required for the FHWA pre-approved Department expense items. However, if these items are included in a contract, the PE must sign a memo justifying the cost of each item and send it to the Office of Federal Resources. A copy of this memo must be included in the construction contract submittal package.

To request Federal participation for items not pre-approved by FHWA, the PE must generate a PIF and obtain approval. A new PIF is required for each contract.

For federally funded projects, if the RE Office is furnished by the Department, it shall not be federally funded. However, if the RE Office is provided by the contractor as a bid item, it shall be federally funded.

## 7.10 CONTINGENCIES

Contingency funds are included to compensate the Contractor for work:

- Not covered by the bid items
- Not covered by supplemental work
- Within the scope of the Contract
- Necessary for completion of the Contract
- Ordered by the Engineer

The standard contingency is 5 percent of the project cost estimate and calculation is automated by the BEES program. The contingency percentage in the BEES will be rounded by  $\pm$  0.1% so that the project total dollar amount is rounded to the nearest thousands.

Document the need and cost for nonstandard contingencies. The maximum contingency is 10 percent.

Requests for use of nonstandard contingencies must be approved by the Chief Engineer. Forms and procedures are included in the project development directive PD-04 Project Contingencies and Supplemental Work.

## 7.11 SEGREGATING THE ESTIMATE

#### **7.11.1 GENERAL**

It is the District's responsibility to segregate the BEES. Projects with multiple funding sources or Structures items must have a segregated BEES estimate identifying the funding sources and levels of funding. Enter all segregated estimates into the BEES during project design. Because funding segregations are required in the funding summary, estimates must be segregated when the District submits the construction contract to DESOE. Incorrectly segregated estimates may delay contract award.

## 7.11.2 FEDERAL AID

Federal-aid contracts must be segregated by:

- a. District work.
- b. Structures work. Separate each structure by component level.
- c. Work paid for by others. When funding is from sources other than federal or State, the project cost estimate must be segregated and each funding source must be identified. If there is a cooperative agreement on a project, a copy of the agreement must be included with the construction contract submittal and must also be sent to the Office of Federal Resources. Other funding sources may include:
  - i. Cities, counties, or local transportation agencies contributing to construction costs under cooperative agreements.
  - ii. Utility agreement.
  - iii. Right-of-Way contract.
  - iv. Cooperative agreement that requires anyone other than the State to pay for any of the bid items or supplemental work.
  - v. Purchase order, or other instrument.
- d. Utility relocation when done by contract item work (by right-of-way, utility, or railroad agreement).
- e. Work done on the same Contract but outside of the federal-aid-project limits.
- f. By Program Element Component (PEC) Code (for example a project may be programmed with both SHOPP and STIP funds)

The District is required to submit the segregated BEES as part of the complete PS&E submittal to the Division of Budgets Office of Federal Resources. The Area Engineer will review the BEES and identify non-participating items. The District is not required to segregate out non-participating items in the BEES unless specifically requested to do so by the Office of Federal Resources. When it is required that non-participating items be segregated out in the BEES the District will be notified by the Office of Federal Resources Area Engineer.

## 7.12 DETERMINING CONTRACTOR'S LICENSE REQUIREMENTS

Contractor license requirements are shown in the notice to bidders. The Contractor's classification must cover the majority of the work.

For all projects, the District determines the applicable contractor license classifications. For informal projects, DES-OE makes this determination. See the Description of CSLB License Classifications at <a href="http://www.cslb.ca.gov/">http://www.cslb.ca.gov/</a>.

## **SECTION 8 TASK MANAGEMENT**

## 8.1 PURPOSE

This section describes how to set up project work plans for construction contract submittal, RTL, advertisement for bids, bid opening, award and approval, factors that affect schedules, monitoring tools, and roles and responsibilities of staff.

## 8.2 BACKGROUND

DES-OE staffing and the ability to deliver district projects are dependent on district allocations. Allocations are dependent on the workload and schedules in project work plans. Executing the work plan requires close coordination between district and DES-OE staff.

#### 8.3 RESPONSIBILITIES

## 8.3.1 PROJECT MANAGER

- Negotiates work agreements with DES-Project Liaison Engineers (PLE) and DES-OE Task Manager to develop project work plans.
- Negotiates Contract for Delivery (CFD) schedules with DES-OE Task Manager prior to commitment to the Director.
- Before submitting a project to DES-OE, verify Project E-FIS ID number and Phase 1 is open and all DES-OE units are resourced in PRSM for timesheet charging in accordance with latest WEN. If a project is split or combined, please notify DES-OE Task Manager immediately for new Project E-FIS ID. Do not close Phase 1 until 10 business days after Approve Contract (Milestone 500).
- Verifies district functions are resourced for WBS 265 activities.
- Submits constraint documentation in a timely manner to meet requested schedules.
- Submits Funding Package and secures authorization, allocation and approval of funds for advertising and awarding contracts in an amount sufficient to cover the capital cost of construction.
- Monitors project progress and is proactive in resolving District and HQ issues.

# 8.3.3 DIVISION OF ENGINEERING SERVICES-OFFICE ENGINEER TASK MANAGER

- Develops DES-OE workload and duration estimating tools.
- Develops workload projections and resource needs.
- Validates project resources and schedules in PRSM at time of construction contract submittal and accepts contract for processing once all requirements are met.
- Negotiates and validates DES-OE fiscal year resource allocations.
- Monitors and reports on DES-OE activities (start, finish, percent complete, expended hours and hours to complete).
- Monitors and negotiates changes to project schedules and resources.

## 8.3.4 DES-OE SCHEDULING ENGINEER

- Receives construction contract submittal and verifies completeness.
- Validates completion of advertising requirements.
- Sets advertising and bid opening dates.

## 8.4 ESTABLISHING MILESTONE TARGET DATES

DES-OE's ability to deliver projects to Advertisement and Award is dependent on the districts providing resources and activity durations. Project Managers should the current DES-OE Workload and Duration Estimating (http://www.dot.ca.gov/hg/esc/oe/rtl/ResourceTable.pdf) Scheduling Tool or (http://oe.dot.ca.gov/project control and support/task management/DES-OE-Scheduling-Tool.xls) when developing project work plans. DES-OE Milestones and Activities are described in the WBS 265 in the Work Plan Standards Guide (http://projmgmt.onramp.dot.ca.gov/). Districts should schedule target RTL dates such that the number of projects and dollars are spread evenly through the guarters of the fiscal year. This will result in more bidder competition and lower bids. Projects must be RTL and funded to be advertised. Funding allocations and approvals should be timed concurrently with RTL target dates.

Project Managers should also consider:

- Ideal begin construction date.
- Funding source and availability.
- Ability to meet Best Bid Standards for Construction Contracts.
- Set durations and provide resources to DOE and DES-OE accordingly.
- FHWA requires an Agreement End Date (AED) to be assigned to the project. The AED will be 21 months after the M800 milestone and the project manager must ender this date in the FFAR form.

## 8.4.1 CONTRACT FOR DELIVERY (CFD)

The CFD is an annual contract signed between the District Director and the Caltrans Director for fiscal year project delivery. Project Managers should validate that their project milestones conform to the DES-OE Workload and Duration Estimating table before the CFD is signed.

#### 8.4.2 MINOR A PROJECTS

Schedule Minor A projects to meet an optimum begin construction date. Minor A projects and projects partially funded with Minor B funding must be awarded before the end of the fiscal year in which they are programmed.

At a minimum, use the DES-OE Workload and Duration Estimating Norms or Scheduling Tool in Section 8.4 and work backwards from June 30 to schedule delivery. Be aware of CTC vote requirements if applicable. If you are applying federal funds to the project, be sure to allow for adequate processing time for the E-76 FHWA authorization process through HQ Division of Budgets, Office of Federal Resources.

Deliver the program early to avoid failures due to DES-OE processing capacity issues, addenda delay, or contract award issues.

Late submittals contribute to unbalanced delivery and results in poor bid competition, higher bids, and the potential to miss the construction season.

#### 8.4.3 MAJOR MAINTENANCE PROJECTS

Major Maintenance Projects are capital outlay projects funded by the Maintenance Programs and must comply with the same laws and Department project delivery policy requirements as Capital Program Projects.

Funding for Major Maintenance Projects is restrained by fiscal year. Bid opened Major Maintenance Projects that are not awarded in the fiscal year planned shall be funded first from the following fiscal year when the budget is approved.

At the beginning of each fiscal year the Maintenance Division provides DES-OE with a list of Major Maintenance approved district projects. Projects delivered to DES-OE not on the list will not be advertised until approved by the Maintenance Division.

## **Dollar (\$) Projects**

The Maintenance Program maximizes the construction of projects during the construction season uses a funding tool called \$ Projects. \$ Projects require specifications that inform the bidders that the contract will be awarded this fiscal year but work cannot begin until directed by the Department in the next fiscal year.

In accordance with the law, DES-OE does not release the \$ Project specification language until the Maintenance Program informs DES-OE in writing that sufficient funds have been appropriated for such projects.

## 8.5 PROJECT SCHEDULE CONSIDERATIONS

#### 8.5.1 NOT IN THE DELIVERY PLAN

DES-OE will not list any projects if they are not listed in the Division of Project Management PDWD Delivery Plan. District must obtain approval for DES-OE to proceed with project processing from the Chief, Office of Project Delivery and Workload and Development, Division of Project Management.

### 8.5.3 PROJECT FUNDING

Department policy and Federal Law (if federally funded) require districts to obtain CTC fund allocation and Federal Fund authorization respectively before contract advertisement.

Instruction for processing CTC fund allocation can be found on Transportation Programming's Office of Capital Improvement Programming Website (<a href="http://www.dot.ca.gov/hq/transprog/allocation\_new.htm">http://www.dot.ca.gov/hq/transprog/allocation\_new.htm</a>).

Instructions for securing Federal Fund authorization can be found at the Headquarters Division of Budgets, Office of Federal Resources Website (<a href="http://onramp/hq/budgets/federalresources/library/FEDERAL%20ELIGIBILITY">http://onramp/hq/budgets/federalresources/library/FEDERAL%20ELIGIBILITY</a> Final.pdf).

A flow chart of the process after RTL that districts are responsible to follow to secure project funding is on the Division of Engineering Services, Office Engineer Website:

(http://oe.dot.ca.gov/project\_control\_and\_support/scheduling/flowcharts/rtl\_to\_adv\_flowchart.pdf).

## 8.5.4 CONTINUING DISTRICT COMMITMENT TO PROJECT

Timely submittal of addenda and District recommendations for award are necessary to keep the project on schedule.

## 8.6 PROJECT MONITORING TOOLS

## 8.6.1 DIVISION OF ENGINEERING SERVICES-OFFICE ENGINEER INTERNET INFORMATION

The DES-OE Internet site contains information on currently advertised and awarded roadway and structure projects on the California Highway System. This information consists of complete advertised sets of plans, special provisions, addenda, Federal Wages, Standard Plans, Standard Specifications, Asphalt Price Index, Construction Cost Index, Historical Cost Data, Bid Results, Plan Holders Lists, Bid Locations, Bidder Inquiries, and Award status.

## 8.6.2 DIVISION OF ENGINEERING SERVICES-OFFICE ENGINEER PROJECTS DATABASE

The DES-OE Projects Database, accessible via FileMaker Pro, contains real-time status information for projects currently being processed by DES-OE. District staff with FileMaker Pro or Internet Explorer can view a live Project Status report using the guidance at this Website (<a href="http://oe.dot.ca.gov/project\_control\_and\_support/scheduling/manuals\_guides/view-OE-Project-Status.docx">http://oe.dot.ca.gov/project\_control\_and\_support/scheduling/manuals\_guides/view-OE-Project-Status.docx</a>).

# **SECTION 9 FUNDING PACKAGE**

#### 9.1 PURPOSE

This section provides information, requirements, roles, and responsibilities for delivery of a complete Funding Package. A complete Funding Package will assist the Department to effectively advertise and award construction contracts in a timely manner. See the website for additional information. (http://www.dot.ca.gov/hg/esc/oe/rtl/Funding/).

#### 9.2 BACKGROUND

The State Contract Act requires the Department to verify sufficient project funding before advertisement. Apportionment to funding sources must be properly identified or fund authorizations cannot be completed in a timely manner before award.

The Funding Package was implemented by DES Decision Document 39, Funding Package, by Brent Felker, dated January 15, 2003, in the interest of consolidating the various pieces of funding information into one collective document. It serves as a checklist of items needed to obtain the project funding. It identifies the various project funding sources and allocations in a clear, concise, and comprehensive manner. It includes the supporting documentation necessary for encumbering each fund. The result should be a complete and detailed statement of how the project is to be financed.

The Funding Package consists of:

- 1. A funding summary.
  - a. All funding sources and fund codes associated with the Phase 4 Construction capital phase of the project.
  - b. Instructions on how contributor funding is to be used, either as a fixed dollar amount, a percentage of the cost of the job, or for specific items only.
  - c. Instructions on how funds are to be charged if the bids come in over or under the estimated amount.
  - d. The status of funding approvals including actual, target, and expiration dates.
- 2. A copy of the current BEES file segregated by funding source.
- 3. Copies of all funding documents supporting each funding source.
  - e. Signed Authority to Advertise

#### 9.3 RESPONSIBILITIES

# 9.3.1 PROJECT MANAGER

- Secures sufficient funding to cover the construction cost estimate before project advertisement and resolves any funding shortfall before contract award.
- Ensures that District Project Control setup initial phase 4 funding in the AMS advantage system.
- Maintains federal funding eligibility where applicable by programming projects in FTIP/FSTIP and securing FHWA E-76 approval before advertising (<a href="http://onramp/hq/budgets/library/Federal-aid%20Project%20Funding%20Guidelines%20FY%202010-11%20Signed.pdf">http://onramp/hq/budgets/library/Federal-aid%20Project%20Funding%20Guidelines%20FY%202010-11%20Signed.pdf</a>).
- Obtains and provides DES-OE with written verification from each contributing fund manager and any external entity (as applicable).
- After bid opening, notifies DES-OE if fund splits due to savings or overages are different from the initial fund splits at advertisement. The notification must be accompanied by written approval by the fund managers and detailed instructions on how funds are to be charged.

#### 9.4 FUNDING SOURCES

While some projects are funded entirely from one source (State, federal, contributor, local assistance, maintenance, etc.), most projects are funded by a combination of two or more of the following sources.

#### 9.4.1 STATE / FEDERAL

Funds provided by the State to be reimbursed at a given rate by FHWA
or funds provided by the State only. All federally funded projects must
be in the current FSTIP and have an FHWA approved E-76 before
advertisement. See Transportation Programming home page for
additional information (<a href="http://www.dot.ca.gov/hg/transprog/index.htm">http://www.dot.ca.gov/hg/transprog/index.htm</a>).

#### 9.4.2 OUTSIDE CONTRIBUTOR

• A fully executed cooperative agreement between the Department and external entity is a requirement for RTL.

#### 9.4.3 SUBVENTION FUNDS

 Outside contributors may elect to use Local/Federal funds such as: CMAQ, RSTP, Demo, Safe Routes to School, etc., which may have matching funds provided by the State or the Local Agency as described in the finance letter. Contact District Local Assistance Engineer (<a href="http://www.dot.ca.gov/hq/LocalPrograms/lpp/LPP06-04.pdf">http://www.dot.ca.gov/hq/LocalPrograms/lpp/LPP06-04.pdf</a>). All federally funded projects must be in the current FSTIP and have an FHWA approved E-76 before advertisement.

#### 9.4.4 MAINTENANCE FUNDS

 State funds that must be authorized by Division of Maintenance before advertisement. For 20.80.201.235 - Roadside Safety Improvement projects are federally eligible and require FHWA authorization (E-76) before advertisement. For additional information see (<a href="http://onramp.dot.ca.gov/hq/maint/roadway/index.shtml">http://onramp.dot.ca.gov/hq/maint/roadway/index.shtml</a>).

# 9.4.5 OTHER FUNDING SOURCE

 Funds that do not fall into the above categories such as Office of Traffic Safety (OTS), Emergency Relief (ER), etc.

#### 9.5 FUNDING DOCUMENTS

# 9.5.1 FUNDING REQUEST

A copy of the signed AUTHORITY TO ADVERTISE Form is required to be included in the Funding Package with an identification of all the funds that exist on the project.

Download the Funds Request Form from Office of Capital Improvement Programming (OCIP) Website (http://www.dot.ca.gov/hg/transprog/allocation\_new.htm).

The Funds Request Form is used to request State and/or federal funding on capital outlay projects (Minor A, Majors such as STIP and SHOPP).

When requesting a CTC vote, districts should submit a complete, final, signed Funds Request Form to Division of Budgets the Division of Transportation Programming by the date and time indicated on the Preparation Schedule on the CTC Liaison Web Site (http://onramp.dot.ca.gov/hq/transprog/octcl.html).

HQ Budgets and the Division of Transportation Programming will not accept Draft Fund Requests for placement of projects on a CTC Agenda.

#### 9.5.2 BUDGET VERIFICATION OF HIGHWAY MAINTENANCE FUNDS

Required for Maintenance projects.

#### 9.5.3 BUDGET VERIFICATION OF MINOR B FUNDS

Required when Minor B funds are to be used on a project.

#### 9.5.4 BUDGET VERIFICATION FOR SPECIAL FUNDED PROJECTS

Required when special funds not voted by the CTC are to be used on a project.

# 9.5.5 COOPERATIVE AGREEMENT

Required when a local agency or outside contributor is providing construction funds. Cooperative agreements are legally binding contracts when fully executed.

#### 9.5.6 LOCAL ASSISTANCE FINANCE LETTER

Required for local programmed federal aid on State highways. Finance letters are authorized by the Division of Local Assistance.

#### 9.6 REFERENCES

- Project Development Procedures Manual (http://www.dot.ca.gov/hq/oppd/pdpm/pdpmn.htm)
- Local Assistance Procedures Manual (<a href="http://www.dot.ca.gov/hq/LocalPrograms/lam/lapm.htm">http://www.dot.ca.gov/hq/LocalPrograms/lam/lapm.htm</a>
- Accounting Manual, Reimbursement Procedures Manual, and Coding Manual (<a href="http://accounting.onramp.dot.ca.gov/">http://accounting.onramp.dot.ca.gov/</a>

# SECTION 10 CONSTRUCTION CONTRACT SUBMITTAL REQUIREMENTS

# 10.1 PURPOSE

This section describes the requirements for construction contract submittals to DES-OE. Informal bids project submittal requirements are described in Section 12, Informal Bids Projects.

#### 10.2 RESPONSIBILITIES

# **10.2.1 DISTRICT OFFICE ENGINEER**

The DOE is responsible for transmitting all construction contract submittal information to DES-OE. This is required because construction contracts are submitted electronically using tools available only to the DOE.

# 10.2.2 STRUCTURE OFFICE ENGINEER

The SOE is responsible for transmitting structures plans (TIF or PDF), specifications, estimate, Information Handouts and other submittal documents to the DOE to be integrated and included in the construction contract submittal to DES-OE.

#### 10.3 CONSTRUCTION CONTRACT SUBMITTAL

The DOE sends construction contract submittal to DES-OE and other involved addressees specified on the PS&E Distribution list attached to the Construction Contract Submittal Memorandum reference Appendix E.

#### 10.3.1 CONSTRUCTION CONTRACT SUBMITTALS TO DES-OE

Districts will be credited with a Complete Contract Submittal (PS&E) Date when DES-OE receives the applicable electronic submittals, as described in Table 10-1. The district is responsible for submitting the combined roadway and structures PS&E to DES-OE.

Send construction contract submittals as follows:

- DOE copies the construction contract submittals documents into the PS&E Drop Box.
- DOE sends a notification of the construction contract submittals to the e-mail address: scheduling.oe@dot.ca.gov. Do not attach the submittal documents to this notification e-mail unless directed by DES-OE staff.

The construction contract submittal documents required for all projects are listed in the following Table:

Table 10-1

Requirements for Construction Contract Submittal to DES-OE

Applicable Construction Contract Submittal Items	Acceptable Submittal Format
A. *Electronically Submitted Construction Contract     Submittal Memorandum	PDF
B. *Construction Contract CCP Submittal Form (one PDF file)	PDF
C. *Standard Special Provisions (SSPs)	MSW
D. *Special Provisions Signature and Seal Sheets	PDF
E. *Signed Authority to Advertise (A2A)	PDF
F. *Supplemental Information Folder (folder includes IH & X-Section files, if applicable) (See Section 10-4)	FOLDER
G. Estimate with BEES – Combined	PDF
H. Cost Estimate Certification (CEC) Form	PDF
I. Environmental Certification	PDF
J. Environmental Document (Cat. Ex. Or other Environmental Document)	PDF
K. Funding Pack (Budget Verification, Funds Request, Funding Summary, Etc.)	PDF
L. Justification for Supplemental Items Memo	PDF
M. Justification for State Furnished Items Memo	PDF
N. NSSP Approvals	PDF
O. Approved PIF's	PDF

P. Railroad Clearance Memo (when applicable)	PDF
Q. Right of Way Certification	PDF
R. RTL Certification	PDF
S. Special Notices (when applicable)	PDF
T. Structure Design Concurrence Memo	PDF
U. Storm Water Data Report	PDF
V. TMP Certification	PDF
W. Utility Certification	PDF

<sup>\*</sup>Items noted with "\*" must be included before receiving a PS&E Received date or prior to Listing for Advertisement.

# A. CONSTRUCTION CONTRACT SUBMITTAL MEMORANDUM

The Construction Contract Submittal Memorandum transmits the Construction Contract Submittal Packages to DES-OE, and other HQ divisions. A hard copy of the Memo must be signed by the District/Regional Office Engineer and the Project Manager. The hard copy may then be scanned and submitted electronically with the other Construction Contract submittal documents

The Construction Contract Submittal Memorandum Appendix F is a layout in the AADD database and must be obtained from the DOE. The Construction Contract Submittal Memorandum parts are:

#### A.1 CONTRACT INFORMATION

# a. Priority

Indicate if submittal is a safety or informal project. DES-OE processes informal project as top priorities. (Informal projects shall not be processed as AADD).

#### A.2 PROJECT INFORMATION

### a. Contract Limits

County, routes and work begin and end points post miles.

# b. Project Name

Same as the project name in PRSM.

# c. Work Description

List types of work in general terms using a maximum of 70 characters. See website link to AADD Academy Modules: http://des.onramp.dot.ca.gov/office-engineer/aadd-academy-training

# d. Project Plans Title Header

Same as the project location description on the title sheet.

#### e. Plans

Indicate what version of Standard Plans was used to prepare the project plans. Indicate the number of roadway, structure, and total plan sheets.

# f. Specifications

Indicate what version of the Standard Specifications or General Conditions were used to prepare the special provisions.

#### g. Bid Type

Indicate the type of bid. Select one of three choices.

"Unit Price" – bid is the total of item cost (product of the quantity and unit price of each contract item.)

"Cost+Time" – bid is the sum of the total of item cost and the product of the number of working days bid to complete the work (excluding Plant Establishment) and the cost per day.

"Lump Sum" bid is a single amount for all the items of work.

# h. Classification(s) of Contractor's License Required

Same as the contractor license requirements in the notice to bidders

### i. Special Features

Enter the approval to use date if project has any of the following features:

# Lump Sum

#### Additive/Deductive Bid

#### Escrow of Bid Documents

# Incentive/Disincentive (I/D)

I/D are bonuses and deductions used for meeting internal time constraints and encouraging early contract completion. I/D may be used in conjunction with Cost+Time Bidding.

### Pre-Award Qualifications

See the memorandum, Pre-Bid and Pre-Award Qualifications Provisions, from Robert Buckley dated March 22, 2002 in regard to the approval requirements.

# Tribal Employment Rights Ordinances (TERO)

Required for projects with project limits in particular tribal lands. See Deputy Directive, DD-74R2 Tribal Employment Rights Ordinances (TERO) for requirements.

# Time Related Overhead (TRO)

See 7.6.2

# Warranty

Used only when a project has been approved for the warranty pilot program.

# j. Prosecution of Work

#### Working Days

The number of construction working days provided to finish the work excluding the plant establishment period. See 6.4.2 for points to consider when determining the number of working days.

#### Plant Establishment Period

The number of working days provided to establish plants and maintain irrigation systems. Subtract plant establishment days that will be concurrent with any other construction operations.

#### Total Working Days

The total sum of the construction and plant establishment (if applicable) working days.

#### k. Bid Price Estimate

Indicate the number of contract items, roadway construction cost, structures cost, building cost, total cost, BEES keyword, call out number, and the Certification of Project Cost (Price) and Estimate Approval date. The Project Database automatically calculates the call out number from the project cost. For information on the call out number, see DES Decision Document 45. Use a Rounded Engineer's Estimate for Call out Number, signed by Brent Felker, dated August 27, 2003.

# I. FEDERAL PARTICIPATION

# Oversight Determination

Indicate whether the project is Project of Division Interest (PoDI)(formally called High Profile) regarding FHWA review and oversight. If PoDI, the date the PoDI Project Agreement with FHWA was executed is to be shown. See PDPM Chapter 2, Section 7, Figure 2, for determination of FHWA oversight. Contact the appropriate FHWA Engineer to confirm the determination.

# Federal Aid Number(s)

The Office of Federal Resources provides the Federal Aid Number(s).

# A.3 WARRANTY OF PLANS, SPECIFICATIONS, AND ESTIMATES

#### a. Building Project

Indicate the date of Structure Design Final PS&E concurrence for a building project.

#### b. NSSP

Attach a list of Non-Standard Special Provisions with the name and date of owner approval.

#### A.4 WARRANTY OF NON-INTERFERENCE

# a. Agency Agreement

Identify the agency, provide the date the agreement was issued.

#### b. Environmental Certification

Provide the signature date.

#### c. Permits

Complete the table listing permits that control the execution of the contract, including environmental permits. See 10.4.1 for a list of common permits.

Although copies of the permits are part of the Supplemental Project Information (items included in SSP 2-1.06B), the permits must also be listed in the Construction Contract Submittal Memorandum.

#### d. Railroad Clearance

If there is a Construction and Maintenance (C&M) agreement or service contract, include the railroad company name, and the date of the agreement.

# e. Right Of Way Certification

Provide the date of the certification and the type of the certification.

# f. Traffic Management Plan

Provide the name of the District Traffic Manager or Traffic Management Plan Manager and the date of verification.

# g. Utilities Certification

Approval of High/Low risk utilities.

# h. Water Availability

Identify the name of the agency that provided the water source commitment documentation and the date of the documentation.

#### A.5 WARRANTY OF INFORMATION

If a project has cross sections or an information handout, indicate the dates these documents were submitted to DES-OE. A contract will not be advertised until these documents, if applicable, are submitted.

### A.6 FUNDING

Indicate the date on the Authority to Advertise form. The total funding amount is calculated based on the funding information entered on the Authority to Advertise form in the DES-OE databases.

#### A.7 PROJECT PERSONNEL DATA

List the names of the personnel involved in the preparation of the construction contract. The information is needed for communication purposes.

#### A.8 CONSTRUCTION DATA

Indicate the completion date of the constructability review.

# a. Begin Construction Date Requested

Provide the requested begin construction date.

Constraints to Begin Construction. Describe conditions that impact the beginning of work. This information controls Advertisement and Bid Opening dates. These conditions could be permit requirements, temperature for HMA or seal coat placement, public events, coordination with other projects, etc. Indicate the description, location and dates work cannot be performed.

#### A.9 LANDSCAPE DATA

# a. Highway Planting

Indicate the area of planting and irrigation work required due to new road construction or planting as a mitigation requirement.

# b. Recycled Water

Indicate if the project will use recycled water. Indicate the estimated annual recycled water use for the project.

### c. Worker Safety

Indicate the number of gates, area and quantity of maintenance access roads, area of paving and number maintenance vehicle pullouts.

# A.10 RESEARCH, INNOVATION, AND SYSTEM INFORMATION DATA

Indicate the date Project Delivery Assets Form submitted to Division of RISI.

#### **A.11 SIGNATURES**

Obtain signatures from the Project Engineer, Project Manager and District Office Engineer.

#### A.12 CONSTRUCTION CONTRACT DISTRIBUTION LIST

Indicate and provide the applicable documents to Divisions that are identified.

# B. CONSTRUCTION CONTRACT CCP SUBMITTAL FORM AND PLANS REQUIREMENTS

C.C. Plans Requirements include the followings:

- Project description information on the Title Sheet of the plans must have correct information before DES-OE transfers the file to the DES-OE Project Database.
- Title Sheet Strip Map Post Miles must have correct information before DES-OE transfers the file to the DES-OE Project Database.
- Index of Plan Sheets matches actual plan sheets submitted.
- Submittal does not contain missing, duplicated, or blank plan sheets.
- Plan sheet naming conventions are followed on the project plans.
- Plan sheet orientation is correct when plotted.
- Signed and dated Plans Approval date on the Title Sheet matches the AADD Database before DES-OE transfers the file to the DES-OE Project Database.

The district submits combined roadway and structure project plans as one file in PDF format using a CCP Submittal Form. The district numbers the plans, includes any Revised Standard Plans (RSPs) and completes the title block and plans approval date information and federal aid number, if applicable.

# C. SPECIAL PROVISIONS

District submits special provisions in conformance with Section 6, Special Provisions.

#### D. SPECIAL PROVISIONS SIGNATURE AND SEAL SHEET

Signature and Seal sheets, as shown in Appendix A, have four elements:

Contract number ending in a "4."

- Design Oversight Approval. This block is to be used when the project, or any portion of the project specifications, has been developed by a consultant or local agency. The block must bear the printed name, signature, professional registration number and approval date of the licensed person providing design oversight for the entire project.
- The statement The Special Provisions contained herein has been prepared by or under the direction of the following Registered Persons.
- Space for signatures and seals for each professional discipline involved in the project. The signature and seal lines must bear the signature, registration seal, license number, and license expiration date of the licensed person knowledgeable about and in responsible charge of the specific work for each professional discipline involved in the project. As long as the document is signed and sealed prior to the licensee's registration expiration date, the document is valid in perpetuity - even if the contract is let after the noted expiration date. For a list of disciplines please see the Business and Professions Code Sections 6700-6706.3.

Professional seals should be combined on one sheet with a maximum of 4 per sheet.

If SOE prepares a portion of a project's special provisions, they must submit a completed signature and seal sheet to the district with their proposed final project special provisions. The DOE will combine the project special provisions and submit both the DES-SD and district signature and seal sheets to DES-OE.

# E. AUTHORITY TO ADVERTISE

The District or Regional Director signs the Authority to Advertise form and the DOE submits the completed form to DES-OE.

#### F. INFORMATION HANDOUT

The district submits the Information Handout (IH) as one electronic file (eIH) in portable document format (PDF). The district submits the eIH with cover sheet to the PSE Dropbox.

# 10.3.2 CONSTRUCTION CONTRACT SUBMITTALS FROM DOE TO OTHER DIVISIONS

For projects with federal funds, the district must transmit the Federal Funds Authorization Request (FFAR) form, the preliminary E-76 and other required documents listed on the FFAR form to Division of Budgets, Office of Federal Resources Office before the construction contract is submitted to DES-OE. DOE must send construction contract submittal information to other involved addressees specified on the PS&E Distribution list in the Construction Contract Submittal Memorandum as part of the funding process. Failure to comply will result in delays in project funding and advertisement. See the listing of Divisions at the end of the Construction Contract Submittal Memorandum in Appendix E.

DOEs must transmit all the required submittals to other divisions prior to the project being funded and submitted to DES-OE.

# **10.3.3 ENGINEER'S ESTIMATE**

District must have the Combined Estimate with phase 1 EA in the BEES. Only one BEES file for the project must be in the BEES when the project is submitted to DES-OE. If there are multiple BEES files in the BEES (e.g., separate bridge, road and combined files) then the advertisement process is stopped until the District deletes all but the combined BEES file. Submit a copy of the Estimate to DES-OE.

# **10.3.4 JOB FILE**

The District is responsible for maintaining the project history file (Job File).

#### 10.4 SUPPLEMENTAL INFORMATION AND THE INFORMATION HANDOUT

Documents required in the IH (as applicable for the project) include (but are not limited to) the documents described in the following sections.

#### **10.4.1 PERMITS AND AGREEMENTS**

- Railroad Agreements
- Department of Fish and Game. See the Contract Requirements, Section 1602 of the California Fish and Game Code
- California Regional Water Quality Control Board
- United States Army Corps of Engineers
- Biological Opinions referenced by Permits

- Coastal Commission
- United States Coast Guard
- State Lands Commission
- Reclamation Boards
- Water Districts
- San Francisco Bay Conservation and Development Commission
- Tahoe Regional Planning Agency
- Transit Districts
- United States Forest Service
- California Department of Fish and Wildlife. See Fish and Game Code, Division 3, Chapter 1.5, Article 3
- Tribal Employment Rights Ordinances
- Encroachment permits from public agencies

#### 10.4.2 FOUNDATION RECOMMENDATION REPORTS

Foundation recommendations, foundation review forms, pile indicator reports, drivability studies, and other pertinent structure foundation related materials must be submitted to DES-OE for inclusion in the Information Handout. See memo, Foundation Data as Materials Information, signed by James E. Roberts dated November 16, 1994.

# 10.4.3 HAZARDOUS WASTE, ASBESTOS OR LEAD INVESTIGATION REPORTS

These reports are required by Federal and State regulations, State laws and Department policy. See Project Development Procedures Manual (PDPM), Chapter 18, Environmental Contamination and Standard Environmental Reference (SER) Volume I Chapter 10. Site Investigation reports are required for issues such as aerially deposited lead (ADL), naturally occurring asbestos (NOA), and contaminants in soil. A Hazardous Material Survey Report is required for all projects involving work on an existing building. Pertinent information from these reports such as analytical data and sampling location maps are included in the Information Handout. The entire reports are not included as they may contain recommendations for design options not included in the specifications.

#### 10.4.4 MATERIALS INFORMATION

All test data applicable to material sites for a project should be furnished to prospective bidders. This information may include maps, test reports, tabulation sheets, SMARA status, copies of options or agreements with owners of the material sites and other information as specified in the Highway Design Manual.

#### 10.4.5 GEOTECHNICAL DESIGN REPORTS

A Geotechnical Design Report is to be prepared by the Roadway Geotechnical Engineering Branches of the Division of Engineering Services, Geotechnical Services (or prepared by a consultant with technical oversight by DES-GS) for all projects that involve designs for cut slopes, embankments, earthwork, landslide remediation, retaining walls, groundwater studies, erosion control features, sub-excavation and any other studies.

#### 10.4.6 WATER SOURCE INFORMATION

If a project will require significant amounts of water and is in an area under drought conditions or subject to water shortages, water source information must be provided to help prospective bidders locate possible water sources. Water source information includes correspondence and other documentation for all arrangements, whether formal or informal, that have been made to secure water needed for the project.

# 10.4.7 OPTIONAL DISPOSAL SITES

Sites for disposing residue from grinding or grooving the surface of HMA or PCC pavement and bridge decks must be submitted to DES-OE as part of the Information Handout. For more information see Design Information Bulletin Number 84 on the Division of Design Website.

Generally, the information should include

- Cover page with project information
- Index of accompanying information
- Maps of Sites
- Copies of agreements with owners (if applicable)
- Copies of use permits and clearances or MOUs (when they have been obtained by the State)

# 10.4.8 CROSS SECTIONS

Electronic files and/or cross sections to conform to PD-06.

# SECTION 11 DES-OE DRAFT CONTRACT DOCUMENT PROCESSING

Districts are responsible for QC/QA.

# SECTION 12 INFORMAL BID PROJECTS

# 12.1 PURPOSE

The purpose of this section is to define the roles and responsibilities of various functional units as they relate to informal bid PS&E submittal including submittal requirements and processing for informal bid contracts. See Appendix H.

#### 12.2 BACKGROUND

Informal bid contracts processed by DES-OE are competitively bid; but are advertised, bids opened, and awarded in less time than statutorily required for other contracts processed by DES-OE. The statutory time limits are reduced to begin construction work to repair damage caused by an unexpected occurrence that poses an imminent danger to the traveling public, or that is in the best interest of the Department to prevent or mitigate the loss or impairment of life, health, property, or essential public services.

When an emergency exists informal bid processing is used to accelerate the project processing time from receipt of the PS&E in DES-OE to the start of work. This process waives some of the provisions of the California Public Contract Code allowing the Department to advertise and award contracts faster.

Informal bid contracts are not exempt from statutory or policy requirements. Waiver of a statute requires a Governor's Emergency Proclamation or Executive Order suspending the operation of all contracting statutes and regulations. This usually occurs during a catastrophic emergency.

Projects processed for informal bid require a Director's Order, which is obtained with a Director's Order Request - Funds Request. The district will notify DES-OE to discuss the tentative project schedule as soon as it is apparent that an informal bid project is to be submitted to DES-OE for processing. The project schedule includes the following information to be used for the Director's Order Request - Funds Request:

- Advertising date
- Bid opening date
- Award date
- Start of work date
- Number of working days

DES-OE determines the tentative advertisement, bid opening, and award dates based on the criticality of the project. Advertisement periods may be scheduled

for as short as a few days or as long as 2 weeks. Award of the contract may take from 1 to 10 days.

If the project is eligible for federal funding, a draft copy of the Director's Order Request - Funds Request is to be sent to the Division of Budgets, Office of Federal Resources. Attach to the draft copy of the Director's Order Request - Funds Request a memorandum requesting preparation of a PIF with a brief justification for inclusion in the PIF NEPA document, and Right of Way Certification.

Director's Orders for informal bids must be approved before receipt of the complete PS&E.

#### 12.3 RESPONSIBILITIES

# 12.3.1 DEPUTY DIRECTOR, MAINTENANCE AND OPERATIONS

Approves the Director's Order Request - Funds Request. This responsibility may not be delegated.

# 12.3.2 DISTRICT DIRECTOR

- Signs the Director's Order Request Funds Request. This
  responsibility may not be delegated unless the District Director is
  absent by reason of illness or vacation.
- Requests to Office of Business and Economic Opportunity a zero DBE or DVBE goal.

# 12.3.3 CHIEF, DIVISION OF MAINTENANCE

Recommends the approval of the Director's Order Request - Funds Request.

#### 12.3.4 MAJOR DAMAGE ENGINEER

Reviews the Director's Order Request - Funds Request and signs in concurrence.

#### 12.3.5 CHIEF COUNSEL

Reviews the Director's Order Request - Funds Request and signs in concurrence, if California Public Contract Code requirements are met.

# 12.3.6 CHIEF, DIVISION OF PROGRAMMING

- Reviews the Director's Order Request Funds Request, signs in concurrence, and ensures approval of G-11 or other funds. See CTC Resolution G-00-11, Authorization for funding Emergency Condition Response Projects, dated January 20, 2000.
- Processes the Federal Authorization to Proceed, E-76, for federally funded projects.
- Ensures the PIF is processed when required.
- Ensures that G-11 or other funding is processed.

#### 12.3.7 DIVISION OF ENGINEERING SERVICES-OFFICE ENGINEER

- Ensures the contract documents for informal bid contracts are properly prepared and approved.
- Coordinates the advertising, bid opening, and award to the lowest responsible bidder.

#### 12.3.8 PROJECT ENGINEER OR OVERSIGHT ENGINEER

Provides timely information or clarification needed by DES-OE.

#### 12.3.9 DISTRICT OFFICE ENGINEER

- Ensures that informal bid PS&E submittal is prepared and processed in conformance with the Department's policies and procedures.
- Ensures the appropriate distribution of PS&E is made per the Submittal Memo.

# 12.3.10 PROJECT MANAGER

Ensures all constraints are cleared before advertising.

# 12.4 PS&E SUBMITTAL REQUIREMENTS

Project plan delineation does not need to meet the same quality standards expected for a typical project. PS&E quality for emergency projects should only be sacrificed in the interest of saving time. However, the district must still submit PS&Es that present the proposed work consistently, accurately, and completely.

Plans must be legible when reduced in size by 50 percent.

Emergency projects may require highly expedited processing. In addition to the requirements described in Section 10, Figure 12-1, Informal Bids Contract Submittal Checklist the following requirements apply:

- Identification of the PS&E submittal as an Informal Bid Project on the cover page of the Construction Contract submittal memorandum.
- Mandatory pre-bid Job Site Tour/meetings are not recommended for projects with short advertising periods.
- Identification of need for nonstandard working days such as calendar days.
- Calculations to justify higher than standard liquidated damages.
- If federally funded, a completed PIF justifying less than 3 weeks advertisement or deviation from other federal standards. The PIF must be processed through Division of Budgets the Office of Federal Resources, and signed by the appropriate FHWA field engineer.
- Proposed Incentive/Disincentive provisions must conform to the requirements in the PD-14, Delegation of Authority for Use of A+B Bidding and Incentive/Disincentive (I/D) Provisions (<a href="http://www.dot.ca.gov/hq/projdev/directive/PD-14-Cost-and-Time-Bidding.pdf">http://www.dot.ca.gov/hq/projdev/directive/PD-14-Cost-and-Time-Bidding.pdf</a>). District Director approval and supporting cost/benefit calculations must be submitted with the PS&E.

The district must provide a list of at least 7 to 10 contractors who have been contacted and have indicated an interest in bidding the contract. They should be informed about the general type of work, the approximate total cost of the project, and the tentative schedule including advertising date, bid opening date, start work date.

The bidder list must include:

- Company name
- Street address (not a PO Box)
- Telephone number
- Facsimile number
- Contact person (if possible)
- E-mail address

#### 12.5 PROCESSING

DES-OE gives the highest priority to informal bid contracts. If necessary, DES-OE will suspend work on other projects that would delay or interfere with the progress of informal bid contracts. In order to meet the negotiated target dates for the expedited schedule, district and SOE personnel must make the same commitment. It is imperative that district and structure PEs, SE, and other appropriate staff members respond quickly to DES-OE requests for information. This may include working evenings, weekends, and holidays.

#### 12.6 ADVERTISEMENT

In rare occasion some emergency projects are issued exemptions from State and local permits by an executive order from the Governor. Other selected emergency projects may require contract constraints to be cleared before bid opening and be advertised on a risk basis that is, without all required documentation delivered to DES-OE. The goal is to advertise emergency projects within a 2 week period after PS&E submittal to DES-OE.

Projects will normally not be advertised until the following has been received:

- A complete DR.
- Permits, Right of Way certification, and execution of agreements.
- Supplemental Project Information.
- An E-76 for federally funded informal projects defined as new construction or reconstruction on the Interstate following catastrophic failure. The E-76 must be dated no later than the advertisement date or federal funding may be forfeited.
- A Director's Order Request Funds Request must be processed by the district and sent to the appropriate headquarters division as early as possible. Contracts cannot be advertised before execution of the Director's Order or before funds have been allocated for the project.

Limited time is available for contractors to become aware of an informal bid contract, obtain bid documents, and develop responsible bids. The district must contact interested contractors capable of performing the type of work involved.

Districts are encouraged to use the Department's Emergency Contractor Registry:

(http://onramp.dot.ca.gov/hq/maint/orway/ha23/misc/registry.htm).

Contractors should be informed about the general type of work, and the tentative schedule (advertise, bid opening, start of work). Provide DES-OE a list of 7 to 10 contractors who should receive a bid package before the advertising date.

For federal eligible projects, do not contact contractors until the E-76 has been processed. Contacting a contractor before federal authorization will forfeit federal funding for the project.

Informal bids contracts, bid packages will be made available online.

#### 12.7 BID OPENING AND AWARD

A critical informal bid contract may be scheduled for any day of the week or any location.

# FIGURE 12-1 INFORMAL BIDS CONTRACT PS&E SUBMITTAL CHECKLIST

DES-OE must receive the following electronic files in MS Word format:

Specifications

DES-OE must receive the following as electronic files in Adobe Acrobat PDF format:

- Signed Director's Order Request Funds Request
- Damage Assessment Form, if applicable. See the Major Damage
- Restoration Coordinator's Handbook for information about DAFs.
- Signed Submittal Memo and signed RTL Certification Form
- Right-of-way Certification No. 1 or 2
- Required permits and agreements
- Railroad clauses (included in Information Handout) (if required)
- Information Handout (if required)
- Project Engineer's Certification of Utility Facilities
- Combined Engineers Estimate
- PS&E CCP Submittal
- Environmental certification
- Storm Water Data Report
- PE's seal and signature sheet (for special provisions book)
- List of 7 to 10 bidders with the following information:
  - Name
  - Telephone Number
  - Address

- Fax
- Email Address
- Cross Sections (if required)
- Approved District Director's requests from Office of Business and Economic Opportunity to have a zero DBE or DVBE goal for Same Day award contracts.

# SECTION 13 CONTRACT ADDENDA

# 13.1 PURPOSE

The purpose of this section is to define and describe the addendum process. It is also to ensure the respective units know their roles and responsibilities in addendum processing. Addendum processing must be given highest priority.

Addendum preparation is covered in the DES-OE Website (<a href="http://des.onramp.dot.ca.gov/office-engineer/office-construction-contracting-coordination-and-quality-program">http://des.onramp.dot.ca.gov/office-engineer/office-construction-contracting-coordination-and-quality-program</a>).

#### 13.2 BACKGROUND

An addendum is a change to the contract documents of an advertised project. Addenda are issued primarily to correct significant errors, omissions, or conflicts in the contract documents. For bidders an addendum is the instrument used to convey material changes made to the contract documents. Once bids have been opened project changes can only be made by rejecting all bids and re-advertising, or by issuing a change order during construction.

#### 13.3 RESPONSIBILITIES

#### 13.3.1 PROJECT ENGINEER/DISTRICT OFFICE ENGINEER

- Prepares plans, specifications, redlined copy of the project cost estimate, and Bid Item List for addendum.
- Contacts SOE and other functional units regarding additional addendum items.
- Consolidates all items from other functional units in addenda.
- Obtains approval from FHWA for addendum changes per Stewardship Agreement.
- Prepares specifications for addendum reviews.
- Processes addendum letters.
- Transmits addendum letters to DES-OE.

#### **13.3.2 PROJECT MANAGER**

Concurs with addendum.

# 13.3.3 AFFECTED FUNCTIONAL UNITS

Concur with addenda.

#### 13.3.4 DISTRICT OR REGIONAL DIRECTOR WITH AADD AUTHORITY

Approves and signs addendum.

#### 13.3.5 DES-OE

# 13.3.5.1 DES-OE Construction Contracting Coordination and Quality Program Chief

• Establishes and maintains statewide policy and guidance for the preparation and processing of addenda.

#### 13.3.5.2 DES-OE AADD Coordinators

- Provides guidance and support to the districts in the preparation and processing of addenda.
- Acts as a liaison and is the single focal point of contact for communication and coordination between the district and DES-OE functional units.
- Provides a final review of the draft addenda letters before they are sent to the district for director's signature.
- Maintains and revises the addenda letter templates.
- Maintains and revises addenda process and procedure guidance for the districts.

# 13.3.5.3 DES-OE BID BOOK and Addenda Unit

- Provides clerical support in the preparation and processing of addenda.
- Posts addenda letters in PDF format on the DES-OE Addenda website.
- Posts addenda on the electronic bid website, (BidX)
- Sends e-mail notification to selected Department staff and bidders that an addendum has been processed and posted.

#### 13.4 EVALUATE NEED FOR ADDENDA

Evaluate the following when deciding to issue an addendum:

- Importance of the change
- Resources required and available to prepare, process, and issue the addendum
- Impact of issuing the addendum on project schedule including bid opening, award, and beginning of contract work

Contract changes proposed by SOE and other functional units must be requested through the district and processed by the DOE. By California Public Contract Code section 4104.5, addenda which have a substantial cost impact may not be issued within 72 hours of bid opening unless a postponement of the bid opening is provided. Substantial costs impact is determined by the awarding agency. DES Decision Document 38, 72 Hours Timely Notice to Bidders of Bid Opening Postponement, signed by Brent Felker, dated January 15, 2003 can be referred to for additional requirements.

Do not use addenda to correct significant errors, omissions, or conflicts in the contract documents, or materially change the scope, character, cost, or project limits, from those authorized in the NEPA approval, PS&E approval, or E-76 authorization without FHWA approval.

#### 13.5 FHWA ADDENDA APPROVAL

FHWA approval is not required when an addendum changes portions of a project identified as a delegated project under the provisions of the active Stewardship Agreement. In the case of a PoDI project, FHWA approval is not required when an addendum changes portions of a project unless specifically required under the PoDI Project Oversight Agreement for the project. An executed Prior Approval-Contract Addendum form must be furnished to the Department by FHWA when the formal request for addendum approval is processed.

An addendum that changes the scope of a federal aid project is required to have an updated NEPA document and E-76.

The Department routinely approves the following types of addenda for federal aid projects:

- a. Addendum affecting the Notice to Bidders such as:
  - Bid Opening Date, time, or location
  - Contractors Licenses

- Federal Minimum Wage Rates
- Pre-bid meeting information
- Addendum correcting portions of a project that are not identified in the PoDI Project Oversight Agreement as requiring prior FHWA addendum approval.

#### 13.6 ADDENDA PREPARATION

All addenda are issued to bidders electronically and are posted on the Caltrans Office Engineer Website. Electronic files added or replaced by addendum are to be included with the submitted addendum package.

DES-OE no longer requires a hard copy Job File. The district has the sole responsibility for ensuring that any and all documents related to the project are included in the Job File that are kept in the districts.

#### **13.6.1 ADDENDA**

**District prepared addendum**: District prepares the addendum letter using the current addenda letter template downloaded from the DES-OE website. District submits the addendum package to DES-OE BBAU for processing. The delegated District or Region Director signs the addendum letter. Addendum preparation is covered in the DES-OE Website.

**DES-OE prepared addendum**: Addendum that only revise the Federal Wage Rates are prepared by DES-OE BBAU and signed by the Senior AADD Coordinator. Addendum that address electronic bidding issues are prepared by the DES-OE E-bid team and signed by the DES-OE Systems Chief.

#### **13.6.2 SCHEDULE**

Addendum should be issued as soon as possible before bid opening. To process an addendum and to maintain the scheduled bid opening, DES-OE must receive the addendum at least 24 hours before the addendum issue date. Addenda that affect how the bid is prepared, who might bid on the project, or which suppliers and subcontractors might be interested should be issued as quickly as possible to prevent bid proposal rework.

If the addendum impacts pre-bid submittal review time of prospective bidders, subcontractors, and suppliers District should postpone the scheduled bid opening to allow the prospective bidders enough time to adjust and prepare accurate bids.

By California Public Contract Code section 4104.5, addenda which have a substantial cost impact may not be issued within 72 hours of bid opening unless a postponement of the bid opening is provided. Substantial costs impact is determined by the awarding agency. Addenda that are issued 1 to 2 weeks before

bid opening should consider including a postponement of bid opening to allow the bidders enough time to incorporate addendum changes into their bids.

Requirements for addenda processing:

- 1) Within the 72 hour of Bid Opening date signed addendum must be submitted no later than 1:00 pm for addendum to be posted on the same day. If after 1:00 pm, addendum date may need to be change and a new signature may be is required.
- 2) Same day of Bid Opening date signed addendum must be submitted no later than 1:00 pm to postpone the Bid Opening date and any other changes to the PS&E.
- 3) Outside of the 72 hour of Bid Opening date, addendum must be submitted no later than 2:00 pm, if submitted after 2:00 pm, AADD Coordinator will work with district to determine if it is necessary to change the addendum date and get new signature.

Meeting these requirements will ensure that addendum can be posted the next business day.

Plan sheet revisions will require resubmittal of the CCP with the new addendum date.

# **ADDENDUM CHECKLIST**

 _ 1.	Contact DES-OE Bid Book & Addenda Unit to confirm addendum number, processing schedule, and addendum date.
 2.	Postpone bid opening if necessary or appropriate.
 _ 3.	Confirm new bid opening date with DES-OE Scheduling Unit.
 _ 4.	Use correct and current AADD addendum form letter and e-mail notification letter from DES-OE Website at ( <a href="http://des.onramp.dot.ca.gov/office-engineer/office-contracting-systems">http://des.onramp.dot.ca.gov/office-engineer/office-contracting-systems</a> )
 _ 5	Verify that the following project information is consistent between the addendum letter and the contract documents:
	5a. Contract No.
	5b. District, County, Route and Post Mile designations
	5c. Federal aid number(s), if project has federal funds
	5d. Project title
	5e. Bid opening date
 _ 6.	Follow instructions in the AADD Addenda Process Overview to prepare revised plan sheets, revised Bid Item List pages, and other attachments.
 7.	The addendum date and number are correct on the letter and all attachments.
 _ 8.	References in the letter to project plan changes are accurate.
 _ 9.	Added plan sheets are numbered correctly.
 _ 10.	References in the letter to Notice to Bidders and Special Provisions book changes are accurate.
 _11.	Added specifications are numbered correctly.
 _12.	References in the letter to Bid Item List changes are accurate.
 _ 13.	Revised Bid Item List pages have the correct number of columns and are numbered correctly.
 _ 14.	Previous addenda for this project have been checked to avoid redundant changes
 _ 15.	Complete the "Addenda Data Info Form" and return to DES-OE Bid Book & Addenda Unit.

# SECTION 14 DISTRICT RECOMMENDATION FOR AWARD/REQUESTS TO REJECT BIDS

### 14.1 PURPOSE

This section provides guidance to the staff involved in the preparation of the District Recommendation for Contract Award and the Requests to Reject Bids.

#### 14.2 RESPONSIBILITIES

#### 14.2.1 PROJECT MANAGER

Reviews the award recommendation/request to reject bids prior to submittal to DES-OE.

# 14.2.2 PROJECT ENGINEER, DESIGN ENGINEER, DISTRICT OVERSIGHT ENGINEER, AND CONSTRUCTION ENGINEER

- Performs an independent unbalanced bid analysis prior to preparation of the award recommendation for submittal to DES-OE, and provides evaluation to the project manager, district project engineer, design engineer, oversight engineer, and construction engineer for the evaluation of submitted bids.
- Seeks independent bid summary review from the structure construction engineer when structures are involved.
- Documents discussions with bidders for clarification of bid items in question.
- Provides information or clarification needed by DES-OE pertaining to items identified as mathematically and/or materially unbalanced.

#### 14.2.3 DISTRICT OFFICE ENGINEER

- Acts as liaison for DES-OE and the district to resolve issues in a timely manner.
- Performs an independent unbalanced bid analysis prior to preparation of the award recommendation for submittal to DES-OE.
- Signs or concurs with the award recommendation or request to reject bids.

#### 14.2.4 DES-OE

- Performs quality assurance reviews on district recommendations and requests to reject bids to ensure unbalanced bid analysis are performed.
- Works with the DOE to resolve issues.

#### 14.3 COMMUNICATIONS WITH BIDDERS PRIOR TO BID OPENING

Pre-bid opening communications with bidders should be limited to contacting potential bidders to make them aware of the project location, work type and bid opening date. It's permissible to ask them if they plan to bid and if not, why not.

Avoid bidder discussions regarding contract specifics that could be construed as bidder's inquiries, potential addenda, CCO's etc. Refer these type of questions through the bidder inquiry process.

#### 14.4 DISTRICT RECOMMENDATION

DES-OE is responsible for preparing and processing the documents needed to award a contract or reject a bid. Within one business day after bid verification, the DES-OE Awards Unit posts the bid opening results in the Bid Summary Results website; <a href="http://dot.ca.gov/hq/esc/oe/planholders/oe bidsum result.php">http://dot.ca.gov/hq/esc/oe/planholders/oe bidsum result.php</a>.

This bid summary shows each bid item, the total bid, and the listed subcontractors for each bidder on a project.

Districts/regions are responsible for recommending award of the contract or requesting rejection of bids. The recommendation to award is required for all projects. Unless extended by the DES-OE Awards Unit, the recommendation or request to reject bids is due within five business days after bid opening. The recommendation to award for informal bid contracts is due one business day following the bid opening. Recommendations are sent by e-mail: HQ.DES.OEAwardRecommendation@dot.ca.gov. The recommendation is not to be revealed to bidders or external agencies. The Department's Awards Manual, Chapter 17 has examples of award recommendations and requests to reject bids.

The district/region shall use the following procedures to prepare all contract award recommendations. See Table 14-1, Special Bid Situations for more information.

The district must use the bid summary to perform an unbalanced bid analysis to determine whether to recommend award to the apparent low bidder. The district may also recommend rejecting an individual's bid or request rejecting of all bids, in the event that none of the bids are acceptable. District personnel are encouraged to confer with DES-OE and appropriate Headquarters divisions before deciding whether a bid is acceptable.

The district is required to contact the apparent low bidder, at a minimum. DES-OE recommends that the three lowest bidders (when there are at least three or more bidders) be contacted to discuss factors which may have influenced the bid and to gain insight into the contracting community's interpretation of the plans, specifications, and estimate and to identify discrepancies in submitted bids. Only personnel who are normally involved in the Award Recommendation process should participate in the discussion with the bidder(s), and all information must be kept confidential until the contract is executed or all the bids are rejected.

The recommendation must follow the Award Recommendation letter template posted at <a href="http://des.onramp.dot.ca.gov/office-engineer/office-construction-contract-awards">http://des.onramp.dot.ca.gov/office-engineer/office-construction-contract-awards</a>. Other items to consider that are not already included in the template are:

A justification of significant bid items and the differences in price between the bid items and the Engineer's Estimate should be included in the table provided in the Award Recommendation Letter Template. Each item explanation should be based on the conversation with the bidder(s). The following common responses are not enough to justify large differences in bid item prices:

- The contractor is comfortable with his bid.
- The contractor has experience with this work.
- This is how the subcontractor bid this item.
- The bid is in conformance with other bidders.
- Caltrans estimating practices are usually not correct.
- Compared to the bids, the EE price is high/low.

The item bid cost difference justification must relate to the bidder's strategy for the specific item in question.

- Statement that the low bid has been reviewed for possible mathematical or material unbalancing per 23 CFR 635.102.
   Following are the U.S. Comptroller General's definitions of mathematically and materially unbalanced bids.
- A bid is mathematically unbalanced if the bid is structured on the basis of nominal prices for some work and inflated prices for other work; that is, each element of the bid must carry its proportionate share of the total cost of the work plus profits.
- A bid is materially unbalanced if there is reasonable doubt that award to the bidder submitting the mathematically unbalanced bid will result in the lowest ultimate cost to the Government.
- If applicable, a statement that local agency funds are (or are not) on deposit in accordance with cooperative agreement(s). If the funds are not on deposit, follow up with a confirmation once the funds are on deposit.
- If applicable, a statement that escrow by the three low bidders was successfully completed.
- If applicable, a statement that the days bid to complete an A+B contract are reasonable.
- If applicable, the Right of Way Certification has been updated.
- Any necessary clearances have been received or permits have been issued.
- Recommendation to award to the lowest responsive and responsible bidder of the bids received or to reject bids including justification for the recommendation.
- Signature or concurrence of the District/Region Office Engineer.
- In the event that there is insufficient funding to award the contract, DES-OE will send the Project Manager a Notice of Funding Shortfall. The district should contact DES-OE Awards Unit to discuss the alternatives identified in the notice. After discussion with the DES-OE Awards Unit, include the District's resolution to the funding shortfall in the award recommendation. Requests to reduce supplemental work or Department-furnished material must be approved by the Office Engineer. Requests to change contingencies must be approved by the Chief Engineer.

When bids are lower than the Engineer's Estimate, it is inappropriate
to add supplemental work items or increase the amount of the
existing items or the contingency amount.

### 14.5 REQUESTS FOR BID REJECTION

See Chapter 25 of the Awards Manual for bid rejection procedure. Requests for bid rejection must include:

- Description of significant differences between the Engineer's Estimate and the bids received.
- Description of the competition, whether or not it was adequate.
   Include reasons given by plan holders that chose not to bid.
- Description of any problems with the plans, specifications or estimate
- A review of bidder's inquiries and responses
- Alternatives to bid rejection including supplemental fund vote by the CTC or reduction in supplemental work, Department-furnished Materials or contingencies.
- Description of material changes to the plans, specifications or estimate for the readvertised contract

Disposition of the contract files at DES-OE, e.g. returned to the district, retained in DES-OE or deleted.

### 14.6 BID RESPONSIVENESS, BIDDER RESPONSIBILITY, AND BID PROTESTS

Division of Engineering Services - Office Engineer (DES-OE) is responsible to determine the responsiveness of bids, assess the responsibility of bidders, and respond to bid protests. The DES-OE Office Chief of Awards is sub-delegated this authority.

A bid is nonresponsive if it does not conform to the requirements specified in the special provisions, Standard Specifications, and Bid book. Typical issues include:

- unenforceable bid bond
- incomplete information or missing documents
- conflicting information
- modification of the bid documents or qualifications placed on the bid

The term "responsible" refers to the ability of the Department to anticipate the contractor's successful completion of the work as specified in the contract. Public Contract Code § 1103 states, "Responsible bidder", as used in this part, means a bidder who has demonstrated the attribute of trustworthiness, as well as quality, fitness, capacity, and experience to satisfactorily perform the public works contract." Determination of questions as to a bidder's responsibility requires a formal hearing process (DES Decision Document #48).

Bid protests are typically submitted by bidders as to the responsiveness of the apparent low bid. They may also be submitted by a bidder whose bid has been determined to be non-responsive. DES-OE determines the validity of protests in determining the responsiveness of the low bid.

DES-OE informs the district of determinations of responsiveness and responsibility. A determination of a non-responsiveness bid or a non-responsible bidder results in a bid ranking change and requires the district to revise the District Recommendation based on the new apparent low bid.

## **Table 14-1 Special Bid Situations**

In all Bid Situations an Unbalanced Bid Analysis is required.

Special Bid Situation	Response to Special Bid Situation
The district is unable to contact the low bidder or considers such contact as unnecessary or inadvisable.	Each district is required to contact the apparent low bidder, at a minimum. DES-OE recommends that the three lowest bidders (when there are at least three or more bidders) be contacted in order to gain insight into the contracting community's interpretation of the plans, specifications, and estimate and to identify discrepancies in submitted bids.
Analysis of the bid reveals mathematical	The district must:
or material unbalancing.	Document its findings in the Award Recommendation letter, along with a justification as to why the bidder may/may not be unresponsive.
	Contact DES-OE if the unbalancing is material.
Only one bid is received.	The district is to contact other proposal book holders to inquire as to the reasons for not bidding. This information may be useful in supporting a recommendation to reject the bid or award to the low bidder. The pertinent facts of this investigation should be included in the recommendation
The project has Cost+Time (formerly A+B) bidding provisions.	The district should analyze the low bidder's bid for days to complete the
In Cost+Time projects, the bidder bids on the items as well as the number of days to complete the project. Bidders	work to determine if the work can reasonably be accomplished within that timeframe.
are compared and ranked on the total.	Discuss the structure portions of the work with DES Design and DES Construction.

Special Bid Situation	Response to Special Bid Situation	
The low bidder has a recent history of contract terminations for cause or documented performance problems on the Department's projects.	The district is to include specific contract history relating to the low bidder's performance problems in the recommendation and request a determination of the bidder's responsibility.	
The low bid is 25 percent or more below the	The district should:	
Engineer's Estimate.	Review the Engineer's Estimate for errors in item quantities and/or prices.	
	Review all bidder's inquiries to see if there is a connection with the errors in item prices.	
	Contact the low bidder (preferably the three lowest bidders) to discuss significant bid items in relation to the Engineer's Estimate. If the bidder indicates a mistake was made in the bid, document your findings in the award recommendation letter.	
	Discuss the structure portions of the work with DES Design and DES Construction.	

Special Bid Situation	Response to Special Bid Situation
The low bid is 10 percent or more above	The district should:
the Engineer's Estimate.	Discuss the bid with the low bidder (preferably the three lowest bidders).
	Determine if the competition was adequate. If bidding was limited, the district should contact the proposal book holders who elected not to bid to determine why they did not bid.
	Determine if the timing of the bidding influenced the number of bidders or the bid amounts.
	Determine if the Engineer's Estimate was realistic (discuss the structure portions of the work with DES-Design and DES Construction).
	Determine if the project should be rescoped, and determine the consequences of any delay.
	Mention the factors resulting in the high bid amounts in the recommendation.
No bids received.	The district must contact proposal book holders to inquire as to the reasons for not bidding, and DES-OE to discuss alternatives, e.g., scheduling a new bid opening date or rescoping the project.

### **APPENDIX A SEALS**

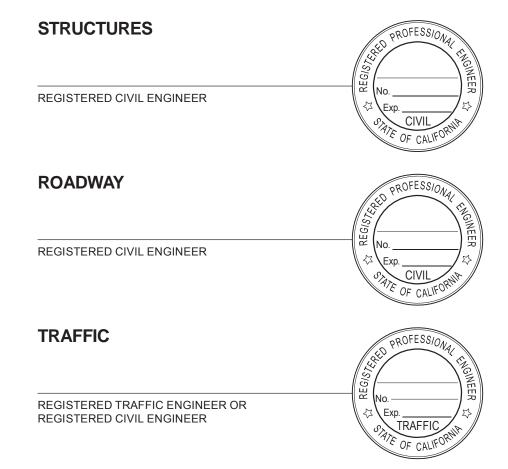
(SIGNATURE AND SEAL SHEETS){ XE"SIGNATURE AND SEAL SHEET:EXAMPLES"}

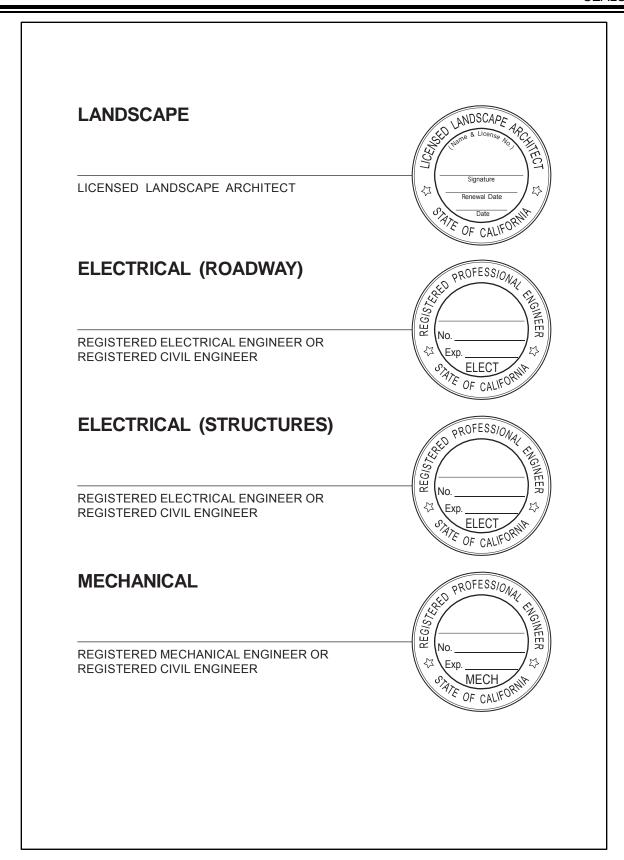
## CONTRACT NO. 00-00004

DESIGN OVERSIGN	HT APPROVAL	REGISTRATION NO.	DATE	Complete for projects
PRINTED NAME	SIGNATURE			prepared by consultants
				or local agencies only.

Approved as to impact on State facilities and conformance with applicable State standards and practices as described in the A&E Consultant Services Manual.

The special provisions contained herein have been prepared by or under the direction of the following Registered Persons.





# APPENDIX B AUTHORITY TO ADVERTISE AADD

	ITY TO ADV				CONS	TRUCTIO		ENT OF TRANSPORTATION AWARD SERVICES
CONTRACT NO	),		PROJECT TITLE					
FEDERAL AID	NO.	FED AUTH						
		(E76) DATE	CONTRACTOR'S LICEN	SE TYPE				CONTRACT DURATION
ESTIMATED O	OST							working days
ADVERTISEMS	NT DATE				PRE-BID	CONFERENCE		
AID SUBNITTA	L GAST DAT AND TB	SE AGENCY WIL	LACCEPT BIDS			ES NO	Is there a Pre	-Bid Conference?
	CATION (COUNTY)		TDØ			MANDATOR	RY DOPTION	AL
					DATE		TIME	
	CONTACT PERSON ( hange SON'S TELEPHONE N							
CONTACT PEX (916) 227-6		UMBER			CONFER	ENCE LOCATIO	N	
	SON'S FAX NUMBER							
010)227-0	2.70	-						
DOCUMENT P	EPAKED BY						PREPARER'S TO	ELEPHONE NUMBER
PROJECT MAN	AGER'S SIGNATURE						DATE SIGNED	
CONTRACT DE								
	e financed from the folia EDERAL FUNDING: PROGRAM CODE	owing funds:	FUNDING	CTC VOTE DATE	BUDGET	FUND CODE	ALLOCATED AMOUN	
COOP	R FUNDING: ERATIVE AGREEMED	NT / LOCAL AGE	ENCY / OTHER	EXECUTION	DATE	AGREEM	ENT NUMBER	AGREEMENT AMOUNT
							TOTAL FUNDING	*
COMMENTS:								
	JOTION CONTRACT I		THORIZATION:	TITLE:				A COPY OF THE CONTRACT  DATE:

## APPENDIX C BUDGET VERIFICATION OF HIGHWAY MAINTENANCE FUNDS

BUDGET VERIFICATION Highway Maintenance Funds (Program 20.80)	
AADD Standard	
DISTRICT: PECT (check one)	
RESPONSIBLE DISTRICT.	Roadside/Drainage Major Maint
	Drainage (State Forces)
	·
WORK TIPE.	Bridges/Superstructure Elements
20.80.230.000 SlopesVegetation 20.80.410.000 20.80.235.000 Stormwater 20.80.470.000	Lighting  Traffic Guidance Support
20.80.270.000 Public Facilities	Tranic Guidance Support.
LOCATIONS:  Cty: Rte: Beg/End PM: # of LM/Bridges/Culvers:	
Cty: Rte: Beg/End PM: # of LM/Bridges/Culvers:	Note for # of;
Cty: Rte: Beg/End PM: # of LM/Bridges/Culvers:	HM1 use Lane Miles
Cty: Rte: Beg/End PM: # of LM/Bridges/Culvers: Total Lane Mile	Think does during the
Cty: Rte: Beg/End PM: # of LM/Bridges/Culvers: Culverts/Bridge	S HM3 use Bridges
PROJECT DESCRIPTION:	
CONTRACT LANGUAGE:  O Fully Funded:  O Fully Funded 124 Projects:	LY FUNDED □\$JOB
O Dollar Job:	
SIGNATURE (District Maintenance Engineer)	DATE
District Maintenance Funds have been allocated for this project:	
SIGNATURE (District Resource Manager)	DATE
SIGNATURE (Maintenance Budget Manager)	DATE
HQ HM Coordinator concurs with fund allocation:	
SIGNATURE (HQ Office of Major Maintenance Support)	DATE
	Revised - 12/2014

# APPENDIX D CCP SUBMITTAL MEMO

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  CCP SUBMITTAL  Date  Original   Revise/Replace   Additional   Addendum  PROJECT IDENTIFICATION  District-EA   Project ID   Phase No. County/Route   Post Mile for Begin and End Construction Limits  Project Engineer (Signing Title Sheet)   Telephone No.   Project Manager   Telephone No.  DIRECTORY IDENTIFICATION  Node ID/Address/EA folder/subfolder(s)  Total PDF Sheets  CADD Contact Person   Telephone No.  Special Instructions:  DES-OE Project Plans Use Only:  Date received:   Date completed:   Date completed:   Date completed:   Date received:   Date received:   Date completed:   Date received:   Date received:   Date completed:   Date received:   Date rec					pear in MS Outlook Directory and
Original   Revise/Replace   Additional   Addendum	CCP SUI		MENT OF TRANSPORTAT	TION	
District-EA Project ID Phase No. County/Route  Post Mile for Begin and End Construction Limits  Project Engineer (Signing Title Sheet) Telephone No. Project Manager Telephone No.  DIRECTORY IDENTIFICATION  Node ID/Address/EA folder/subfolder(s)  Total PDF Sheets  CADD Contact Person Telephone No.  Special Instructions:	[	☐ Original ☐ Re	vise/Replace □ Add	itional 🗆 Addendum	
District-EA Project ID Phase No. County/Route  Post Mile for Begin and End Construction Limits  Project Engineer (Signing Title Sheet) Telephone No. Project Manager Telephone No.  DIRECTORY IDENTIFICATION  Node ID/Address/EA folder/subfolder(s)  Total PDF Sheets  CADD Contact Person Telephone No.  Special Instructions:  DES-OE Project Plans Use Only:		-			
Post Mile for Begin and End Construction Limits  Project Engineer (Signing Title Sheet)  Telephone No. Project Manager  Telephone No.  DIRECTORY IDENTIFICATION  Node ID/Address/EA folder/subfolder(s)  Total PDF Sheets  CADD Contact Person  Telephone No.  Special Instructions:	District-EA	Project ID			
Project Engineer (Signing Title Sheet)  Telephone No. Project Manager  Telephone No.  DIRECTORY IDENTIFICATION  Node ID/Address/EA folder/subfolder(s)  Total PDF Sheets  CADD Contact Person  Telephone No.  Special Instructions:  DES-OE Project Plans Use Only:	District 2 :	Trojectio	That it. Sound.	oute	
DIRECTORY IDENTIFICATION  Node ID/Address/EA folder/subfolder(s)  Total PDF Sheets  CADD Contact Person  Telephone No.  Special Instructions:  DES-OE Project Plans Use Only:	Post Mile for E	Begin and End Cons	truction Limits		_
DIRECTORY IDENTIFICATION  Node ID/Address/EA folder/subfolder(s)  Total PDF Sheets  CADD Contact Person  Telephone No.  Special Instructions:  DES-OE Project Plans Use Only:			Telephone No.	Proiect Manager	Telephone No.
Node ID/Address/EA folder/subfolder(s)  Total PDF Sheets  CADD Contact Person  Telephone No.  Special Instructions:  DES-OE Project Plans Use Only:	(-0	,			
DES-OE Project Plans Use Only:			Telephone No	D.	
{ {!!!!!!!!!					
{ /////////  / / / ///////////////////	Special Instru	uctions:			
//////////////////////////////////////	Special Instru	uctions:			
{ {!!!!!!!!!	Special Instru	uctions:			
{ /////////  / / / ///////////////////	Special Instru	uctions:			
{ /////////  / / / ///////////////////	Special Instru	uctions:			
/ Processed by: '//// Date received: '////, Date completed: /////	Special Instru	uctions:			
			DES-OE Project Pl	///////////////////////////////////////	
			DES-OE Project Pl	///////////////////////////////////////	Date completed:

## APPENDIX E CONSTRUCTION CONTRACT SUBMITTAL MEMO

State of Co	alifornia MENT OF TRANSPORTATION			California Sta	te Transportation Agency
Men	norandum				Serious drought. Help save water!
То:	Division of Engineering Office Engineer Attn: Construction Con		Project ID District E	:	
	DISTRICT	EFFOR ENGINEER	PPNO	:	
	DISTRICT, O				
Subject	: Construction Contract S	Submittal for Advertis	sement		
	Contract Informatio	n:			
	○ Standard (	Safety (201.010)	O Informal Bid		
	Contract Limits:				
	County:				
	Route :				
	Desired Diese Fee	iption: eader: (Insert the Title			
	Description:				
	Description.				
	Plans:				
	Standard Plans Year:				
	Number of Sheets:	Roadway:	Structures:	Total:	
		"Provide a safe, sustainable, integ	Page 1 grated and efficient transportation a's economy and livability"	system	

#### **INFORMATION HANDOUT COVER TEMPLATE APPENDIX F**

See Link: http://des.onramp.dot.ca.gov/office-engineer/office-construction-contractingcoordination-and-quality-program



{ XE "IH\_D01-31-14" } Page 1 of 2

INFORMATION HANDOUT (IH) COVER sheet: Use for IH cover.

### INFORMATION HANDOUT

Contract number ending in phase number 4. Road includes District-County-Route-Post Mile. Project ID.

For Contract No. «Dist»-«Contract No» At «Road»

> Identified by Project ID «ProjectID»

IH Cover Sheet: Use for IH cover. Delete, replace, or add text to match the titles of the Information Handout contents. Use if supplemental project information includes an IH. Include cover if changes are made to IH due to an addendum.

### **PERMITS**

California Department of Fish and Wildlife

U.S. Fish and Wildlife Service

United States Army Corps of Engineers

Non-Reporting Nationwide 404

United States Coast Guard

State of California Land Commission

### WATER QUALITY

California Regional Water Quality Control Board

North Coast Region, San Francisco Bay Section, Los Angeles Region, Lahotan Region, Santa Ana Region, Central Valley Region, Central Coast, or Colorado River Basin Board Order No.

NPDES Permit No. CAS \_

### **AGREEMENTS**

California Department of Fish and Wildlife

Notification No. \_\_\_

National Marine Fisheries Services

Karuk Tribe MOU

### APPENDIX G SPECIFICATION TOOLS AND GUIDANCE

### SPECIFICATION TEMPLATES

The following 3 types of templates are used for specification development and processing:

- 1. "Macros" template contains all of the macros (e.g., strike and hide text, insert SSP).
- 2. "Normal" template is the customized global document template that contains the document settings (e.g., autocorrect, option settings).
- 3. "SSP" template contains the standard document paragraph styles.

Use the templates (and installation instructions) available at: (http://www.dot.ca.gov/hq/esc/oe/2010 specifications templates.html)

### **SPECIFICATION TEMPLATE GUIDES**

Specification template guides are documents created using the correct format and standard document paragraph styles. (Note: These guides do not replace the specification templates mentioned above. The templates must still be installed for specification work.)

For assembling a special provision package, use the SP\_TEMPLATE.docx template guide available at (<a href="http://des.onramp.dot.ca.gov/office-engineer/office-construction-contract-standards">http://des.onramp.dot.ca.gov/office-engineer/office-construction-contract-standards</a>)

For specification development work, use the template guides available at (<a href="http://des.onramp.dot.ca.gov/office-engineer/office-construction-contract-standards">http://des.onramp.dot.ca.gov/office-engineer/office-construction-contract-standards</a>)

### **SPECIFICATION EDITING**

When editing specifications, use the following editing standards for uniformity and to identify the individual responsible for an edit:

- User-initials-are-"comment"-style.¶
- New text is blue and underlined.
- Deleted text is red with strikethrough.
- Interpret the term "delete" in the instructions of the SP template and specifications as "strike and hide."

Do not use the Microsoft Word track changes function.

Do not use hyperlinks, comments, highlighted text, fields (headers are okay), embedded pictures, or bullets.

Check your document with hidden text turned on and turned off to ensure correct style and formatting in your document.

See list of tools and guidance at the end of this appendix for additional editing information.

### **SSP Editing by Specification Engineer or Owner**

Identification	Commentary
District User Initials** (e.g., JAD**)	A District specification writer identifies an edit by adding his or her initials and a double asterisk. The identification precedes each edited paragraph. Information about the edit is added after the identification. For a large project that has many edits, adding the date of the edit is recommended.
SOE User Initials## (e.g., JAD##)	An SOE specification writer identifies an edit by adding his or her initials and a double pound. The identification precedes each edited paragraph.
Owner's first initial and last name** (e.g., J.Duncan**)	An Owner identifies an edit by adding his or her first initial, last name, and a double asterisk. The identification precedes each edited paragraph.
NEW + User Initials** (e.g., NEW JAD**, NEW JAD ##, or NEW J.Duncan**)	For adding a new section or subsection, add "NEW" to the beginning of the identification. A new subsection typically has a subsection title. For adding a new paragraph to an existing SSP, do not add "NEW" to the identification.

### **SSP Editing by DES-OE Reviewer**

Identification	Commentary
DES-OE User Initials*** (e.g., JAD***)	A DES-OE reviewer identifies an edit by adding his or her initials and a triple asterisk. The identification precedes each edited paragraph.
NEW +User Initials*** (e.g., NEW JAD***)	For adding a new section or subsection, the DES-OE reviewer adds "NEW" to the beginning of the identification. A new subsection typically has a subsection title. For adding a new paragraph to an existing SSP, "NEW" is not added to the identification.
ADDED + User Initials*** (e.g., ADDED JAD***)	For adding a new SSP to the PS&E submittal, the DES-OE reviewer adds "ADDED" to the beginning of the identification.
UPDATED + User Initials*** (e.g., UPDATED JAD***)	For updating the version of an SSP in the PS&E submittal, the DES-OE reviewer adds "UPDATED" to the beginning of the identification.
<b>DELETED+ User Initials***</b> (e.g., <b>DELETED JAD***)</b>	For removing an SSP from the PS&E submittal, the DESOE reviewer adds "DELETED" to the beginning of the identification. The entire SSP except the SSP No. and issue date are removed. The identification is inserted before the SSP number.

The following are examples of applying the editing standards mentioned above.

### Edit a paragraph:



### Strike and hide a paragraph:

12.·Use·on·undivided·highways·as·needed.·Edit·as·recommended·by·the·District·
 Traffic·Manager·or·the·District·TMP·Manager·for·the·type·of·operation·that·requires·
 the·stopping·of·traffic,·including·erection·of·girders,·falsework·erection·and·removal,·
 and·time·requirements.¶

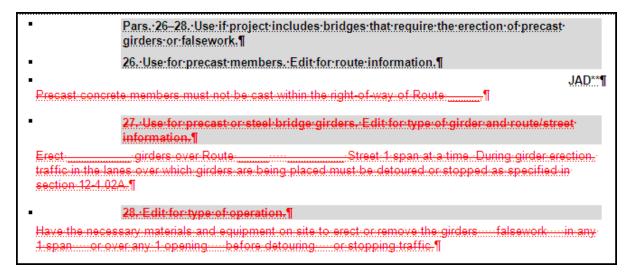
JAD\*\*¶

During blasting, hauling, and slide removal excavation operations, the road may be closed and traffic

stopped for periods not to exceed hours minutes. After 1 closure is made, all accumulated traffic must pass through the work zone before another closure is allowed.

### Strike and hide a series of paragraphs:

(Note: Do not strike and hide the 1st paragraph's instructions.)



### Strike and hide rows in the middle of the table:

(Note: Strike and hide the mark at the end of each row with each row.)

	·are·specified·or·if·lane·require generate·heavy·traffic·through·t	
•		JAD**¶
Designated-holidays-are-as-shown-in-the-follow	ving-table:¶	
■ Desi	gnated·Holidays¤	Ω
<ul> <li>Holiday</li></ul>	Date-observed∞	Ω
■New·Year's·Day¤	January-1st¤	Ω
■ <del>Washington's</del> Birthday¤	3rd Monday in February	Ω
■Memorial:Day◎	Last Monday in May∘	Ω
•Independence·Days	□ July-4th¤	121
■Labor·Day¤	1st·Monday·in·September¤	in.
■Veterans·Day¤	November 11th¤	121
■Thanksgiving·Day¤	4th-Thursday-in-Novembers	t sos
■ Christmas · Day¤	December 25th¤	121
1		-

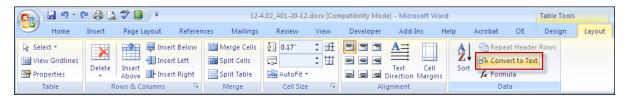
### Strike and hide the 1st or last row of the table:

(Note: If the 1st row below the column headings is struck and hidden, the double line format of the bottom border of the column headings gets replaced by a single line format. If the last row of a table is struck and hidden, the last remaining row will lose its bottom border. Therefore, for these instances, the following steps must be performed.)

1. Strike and hide the rows as shown above:

4.:Use:if:designated:holidays:a     Edit:for:holidays:that:do:not:ge		
•		JAD**¶
Designated holidays are as shown in the following	ng-table:¶	
<ul> <li>Design</li> </ul>	nated·Holidays¤	α
<ul> <li>Holiday¤</li> </ul>	Date observed¤	α
■New·Year's·Day¤	January-1st¤	α
■Washington's· Birthday¤	3rd·Monday·in·February¤	12
■Memorial Day¤	Last Monday in May¤	α
•Independence·Day  □	July-4th¤	α
■Labor·Day¤	1st-Monday-in-September¤	α
■Veterans·Day¤	November-11th¤	α
■Thanksgiving Day	4th-Thursday in November	ı a
■Christmas Day <sup>∞</sup>	December 25th□	α.
1		

2. Highlight the struck and hidden rows and convert the rows to text by selecting the command "Convert to Text" and separating the text using commas:





The converted rows will have this format:



#### Strike and hide list items:

(Note: Renumber the list after list items are struck and hidden.)

20.: Select-appropriate-methods-and-edit-or: delete-pars.: 21–33-to-agree.¶

 12-3.16G·· Service¶

 12-3.16G(1)·· General¶

 Use-one-of-the-following-methods-to-provide-power-for-the-TSS:¶

1.→ Commercial-power-from-an-existing-utility-company¶

2.→ Commercial-power-with-a-generator-backup¶

23.→Generator-system-with-an-additional-generator-as-a-backup¶

### ADDITIONAL GUIDANCE

Specification Style Guide 2010

(http://dot.ca.gov/hq/esc/oe/construction\_contract\_standards/2010/Style\_Guide\_2010-2015.pdf)

Standard Editing for Specification Development and Processing (http://www.dot.ca.gov/hq/esc/oe/rtl/std\_editing.pdf)

Correcting Styles with the SSP Template (<a href="http://des.onramp.dot.ca.gov/office-engineer">http://des.onramp.dot.ca.gov/office-engineer</a>)

NSSP Guidance for the 2010 Standards (http://www.dot.ca.gov/hg/esc/oe/2010/2010%20training/)

Outline leveling

(Includes information regarding erroneous TOCs caused by the use of document map feature of Microsoft Word.)

(http://des.onramp.dot.ca.gov/office-engineer/office-construction-contract-standards

### APPENDIX H STEPS IN PROCESSING INFORMAL BID CONTRACTS

### **BEFORE SUBMITTAL TO DES-OE:**

1. If the Department deems that it is in the best interest of the State for the informal contract to include a <u>same day award</u> provision, the District **must** do the following before submittal of the project to DES-OE:

### 1.1

- a. The District Director must make a request to Office of Business and Economic Opportunity (OBEO) and justify a "zero" DBE or DVBE goal.
- b. OBEO approves or denies the request.
- c. If approved, DES-OE will assign a "zero" goal.

### 1.2

a. The project manager through the Director's Order, requests the capital allocation be made through the G-11 process, CTC vote, or Maintenance.

### **AFTER SUBMITTAL TO DES-OE:**

- 2. DES-OE Independent Quality Assurance (IQA) Engineers will not prepare a DCR memo.
- Informal Coordinator assigns the project.
- 4. Informal Coordinator provides the "Informal Contract Tentative Schedule" to affected group.
- 5. BEES is locked after receipt of the "Informal Contract Tentative Schedule." See Step 24 for BEES processing through Contract Awards.
- 6. Scheduling keys in the advertisement and bid opening dates in the Project Database after receipt of the "Informal Contract Tentative Schedule."
- 7. IQA Engineers process informal project to meet the "Informal Contract Tentative Schedule."
- 8. IQA Engineers obtain project plans from Project Plans Unit (PPU).
- 9. IQA Engineers copy District SSPs and supporting documentation from submittals folder on the OE Fileserver into their own working folder.

- 10. IQA Engineers review the District PS&E's conformance to Section 1.3.6 of the CCD Guide and Section 6 of the RTL Certification. DCC will be developed from this verification.
- 11. IQA Engineer post their comments in DCRD.
- 12.IQA Engineers key in DCC dates in the Project Database when all comments have been posted. The latest of these dates is the actual DCC date.
- 13. IQA Engineers send the "Notification of DCC" memo to the District OE and the personnel listed in the "Notification of DCC" memo.
- 14. The dates for "Notification of DCC" memo and DCC in the Project Database should be the same.
- 15. District responds to the comments in the DCRD. Every comment must have a posted response. District will e-mail IQA Engineers and Informal Coordinator when all responses are posted.
- 16.IQA Engineers verify that all responses are complete and incorporate the revisions in the project plans, estimate and special provisions.
- 17.IQA Engineers resolve each completed comment thread in the DCRD. The resolution of comment/reply constitutes agreement that the issue is resolved.
- 18. IQA Engineers key in respective DR dates in the Project Database. The latest of these dates will become the actual DR date. Note: DES-OE will not enter a DR date until all comments are resolved, NSSPs approved, and district submits applicable permits and agreements, PCE, electronic information handouts and cross sections, RR clauses/memo, Right of Way Certification, Environmental Certification, and PE seal sheets.

### 19. IQA Engineers will:

- a. Incorporate the specialty project plan redlines and revised or added SSPs.
- b. Provide the completed redlined project plans with the Index, Sheet Number and Plans Approval date to PPU for delineating redlines.
- 20. After delineation, PPU will provide the IQA Engineers with a hardcopy for verification (proofing) and for any green lines. The final plans will be posted on the advertised projects website.
- 21. IQA Engineers key in the DCR date in the database. If the specialty engineers are involved, the latest of the date becomes the actual DCR date.
- 22. If the District requests RTL certification, the Scheduling unit will be responsible for RTL Certification and Project Database updates.

### 23. The BEES will be processed:

- a. Contract Awards locks the BEES and sets the goals after receipt of the "Informal Contract Tentative Schedule." This is pending Office of Federal Resources determination of whether the contract will be "NO FED AID" or Federally funded.
- b. Contract Awards provides a copy of the estimate to the IQA Engineer.
- c. IQA Engineers redline the provided copy per review of the PS&E. IQA Engineers to contact the Informal Coordinator if there are major revisions to the estimate. The IQA Engineer is the Task Manager for the completed redlined estimate.
- d. IQA Engineer puts red-lined estimate in the "Estimate box" in Contract Awards no later than 2 days before project is "due to typing." Contract Awards will assign one time item codes, and do other tasks as required.
- e. Contract Awards gives back the estimate with the one item time codes indicated in the BEES to the IQA Engineer 1 day before the project is "due to typing." This is the so-called "Green-lined BEES."
- f. IQA Engineers proof the "Green-lined BEES" and returns to the "Estimate box" in Contract Awards.
- g. Contract Awards gives the original "Green-lined BEES" to BBAU on the day it is "due to typing." This will be the final and tagged copy in the Job File.
- 24.IQA Engineer places the SSPs, PE Seals, XS, Contractor list, and IH (if applicable) in the "Informal" folder in the "Due to Typing" folder. IQA Engineer sends an e-mail to "DES-OE Addenda" with a cc to the Informal Coordinator. This email informs BBAU that an informal contract documents has been placed in the due to typing folder.
- 25. BBAU e-mails the Notice to Bidders and Special Provisions (NTB&SP) and Bid Books to the Informal Coordinator for editing.
- 26. Informal Coordinator edits the NTB&SP and Bid Books and returns back to BBAU.
- 27.BBAU incorporates the edits, prints the books and gives to the IQA Engineer to proof read. BBAU will also give the "Green-lined BEES" to the IQA Engineer.
- 28.IQA Engineers proof the "Green-lined BEES," NTB&SP and Bid Books, make revisions and return back to BBAU. All revisions to the "Green-lined BEES" must go back to Contract Awards for incorporation; otherwise the BEES system will have errors.

- 29. BBAU incorporates revisions and prints a final copy. BBAU gives the hard copy of the final NTB&SP and Bid Books to the IQA Engineer.
- 30.IQA Engineer provides the following documents to BBAU for electronic advertisement:
  - a. Final Notice to Bidders and Special Provisions
  - b. Final Bid Book
  - c. IH if applicable (will be handled by BBAU as provided in Step 25)
  - d. Project plans
  - e. List of contacted contractors
- 31. BBAU posts the following electronic documents:
  - a. Notice to Bidders and Special Provisions
  - b. Project plans
  - c. Information Handout, if applicable
  - d. Federal Wages, if federal aid project
  - e. Cross sections, if provided
- 32. BBAU will email the Final Bid Book to the List of contacted contractors.
- 33. Project is advertised.
- 34. Scheduling will:
  - a. Pull the Bid Items List from the "Weekly-Estimate" in the "Informal" folder located at (\\Stfmcaddm02\hqoevol\\BBU Adden Prep)
  - b. Post the Bid Items List in the Advertised Projects Website
- 35. If an addendum is requested, follow the procedures in the addendum manual.
- 36. Informal project bids are opened and the contract is awarded to the lowest responsible bidder on the same day or within 10 days of bid opening depending on the requirements of the provisions.